

MANUFACTURERS' RECORD.

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BALTIMORE, FEBRUARY 22, 1895.

I AM watching with great interest the work of Mr. Richard H. Edmonds upon the MANUFACTURERS' RECORD, and also the work of Mr. Wm. H. Edmonds in the *Southern States* magazine. No two men are doing more for the South than the Edmonds brothers. They are able, thoughtful and original. They are the best compilers of statistical information connected with the South that I know, and they and their publications deserve most cordial support.—From interview in Galveston News with Hon. Hoke Smith, Secretary of the Interior.

The Usual Result.

THE LINHAM DADO MACHINE CO.,
Manufacturers of
WOODWORKING MACHINERY.

MANSFIELD, OHIO, February 13.

Editor Manufacturers' Record:

It gives us great pleasure to write you, after ten months' advertising in the MANUFACTURERS' RECORD, that we are highly pleased with the results. We have received quite a number of orders wherein our ad. in your paper was mentioned.

In regard to your "Daily Bulletin," we would not be without it. We pay strict attention to each issue. By doing so we find it of great value. Yours very truly,

THE LINHAM DADO MACHINE CO.

THE Washington Post has just added to its already magnificent equipment a new three-decker Scott press. This press has a capacity of 24,000 10-page papers, or 16,000 24-page papers per hour, all of which come from the press folded and ready to be bundled for the mails. At one end the white paper is unwound from a huge roll, and at the other the printed and folded papers are passed out at the rate of 400 per minute.

FIFTY THOUSAND DOLLARS' worth of corn and meat has been sent from the Southern States to the sufferers from Nebraska famine. This was done in accordance with the suggestion of the MANUFACTURERS' RECORD, a Baltimore publication. The incident serves to show how completely the spirit of hatred engendered in war has died out in the second generation.—Fresno (Cal.) Republican.

The Republican's slur against the South is in keeping with the ignorance displayed by many people about everything Southern. The men who fought the battles of 1861-65 were just as ready to contribute to Nebraska's sufferers as the men of the "second generation."

To Reach New England Investors in Cotton Mills.

It is not to be expected that the cotton mills of New England will be moved to the South. Many of the leading cotton-mill companies must inevitably build large mills in the South in order to hold their foreign trade, just as the Dwight and the Massachusetts and a few others are preparing to do. The cotton-mill investors of New England, however, may be expected to make large investments in Southern cotton manufacturing. In some cases this will be done by the organization of distinctively New England companies to operate in the South; in other cases it will be by New England people joining Southern men in the building of mills. In order to present the advantages of the South to leading people of New England who are already investors in cotton mills, the MANUFACTURERS' RECORD proposes to shortly issue a Special Cotton-Mill Supplement. The advantages of the South in general will be carefully covered in this issue. It is intended to send a copy to each director of every cotton mill in New England. Thus for the first time the cotton-mill situation of the South will be fully and comprehensively put before the leading people of New England interested in cotton mills. It is a very simple matter to present the advantages of the South to the New England mills, but it is a much more comprehensive undertaking to present it to every director of New England mills and also to leading investors. This the MANUFACTURERS' RECORD proposes to do.

Any information desired in regard to this issue can be had by addressing the MANUFACTURERS' RECORD.

Industrial Success in the South

Readers of the MANUFACTURERS' RECORD are familiar with the work of the Young Men's Business League of Memphis, Tenn., in securing the removal of the extensive railroad car plant from Litchfield, Ill., to the suburbs of Memphis. The works were completed and placed in operation but a few months ago. As a result of their location near Memphis a tract of land which two years ago was partly covered with forest growth and the rest used for farming purposes is now the site for sixty-two cottages, seven stores, one hotel and a sanitarium, besides the car works. The suburb is growing constantly and substantially.

But what is especially interesting is the success which has attended this new industry from the start. The shops are busy with new work, while a large

amount of repair work is being done, so much, in fact, that another shop is being erected especially for street-car repairs, while Manager Collins is quoted as saying it will probably be necessary to further enlarge the plant in April. This is certainly a good record, and shows what can be done by manufacturers who locate in the South and endeavor to turn out the best quality of work, as the Memphis concern is doing.

To show the value of such an enterprise in the amount of money it distributes in a community and in increasing the population, the MANUFACTURERS' RECORD gives a few figures from a statement of Manager Collins:

We get all material possible from Memphis firms, such as timber, paints, glass, decorative material; in short, anything, except perhaps the iron, which we get from different rolling mills. We make here in our own shops every brace, bolt or other iron that is used about a car, even to the wheels. We have just placed an order with a Memphis firm for \$2500.

We have repaired a large number of cars, and have contracts for many more; also for some new ones. We have just completed some tank cars for one road.

The monthly pay-roll amounts to from \$7000 to \$10,000, besides the thousands upon thousands of dollars we spend for material. Our contracts have been liberal, and the orders ahead are very encouraging.

Is not such an industry just as good as a cotton mill, in case you cannot get the mill? Here is a practical example of the success of diversified industry, and the MANUFACTURERS' RECORD offers it as an argument to the Southern delegations going North.

We repeat what we have already said in this connection—don't try merely for cotton mills; try for other plants. Many a New England manufacturer would come South if he only had its advantages placed before his eyes as the Memphis people placed theirs before the Litchfield company.

HON. JULIAN CARR, of North Carolina, has subscribed \$10,000 to the building fund of the American University, which is to be erected in Washington by the Methodist Episcopal Church. He is said to be the first Southern man to contribute to an educational enterprise north of the Potomac since the war.

MESSRS. WM. BELL & CO., Produce Exchange Building, New York, write the MANUFACTURERS' RECORD that they expect to organize a company to build a 300-ton steel plant at or near Elizabethton, Tenn., and that they will be in the market for a full supply of machinery. Beyond this, no additional information can be had.

DAWSON has raised \$50,000 for a cotton factory. That beats a New England delegation.—Brunswick (Ga.) Times.

Self-help is always the best help. The South must utilize its own capital for its development, and then outside capital will freely come. It is the live, hustling, "self-helping" place that commands the attention of New England capital.

"Less of Politics—More of Business."

"Less of politics—more of business" is being universally adopted in the South. The people of this section have now turned their attention to the utilization of the blessings which nature has given them with greater energy than ever before. They are determined that nothing shall stand in the way of the fullest development of their country; that every energy shall be bent to accomplish this purpose. This is illustrated in the action of the Commercial Club of Birmingham, which is worthy of imitation by every trade organization in the South. At an important meeting held last week the Birmingham club adopted an address to the press of the State. After referring to the salubrious and healthful climate of Alabama, its fertile and productive soil, its rich and abundant minerals, its forests, its fruits and flowers, all uniting to make it an ideal place in which to live, this address says:

These blessings, however, have their greatest value in proportion as they are shared by our fellow men and freed from untoward conditions by statutory restrictions and governmental policy. The press of the land is the great medium by which such blessings are made known, as well as the custodian of that sentiment, which is even more potent than laws or forms of government. The press of Alabama is confronted with a grave and responsible duty, and the Commercial Club of Birmingham, having an earnest desire to see our great State take that position in the land to which she is so richly entitled, confidently makes this appeal to the newspapers of the State to inaugurate a campaign of education, whereby our own people shall be inspired with a spirit of appreciation of the blessings we have and the greater possibilities resulting from their wider distribution and better administration. The press has done and is doing great service in this direction. Still, there is evidence that much more is needed, and now is the opportune time for such work to be done. Capital is halting on our borders, and immigration is knocking at our doors, doubtful of the protection that will be given to the one or the other. Their is no need to create the strongest sentiment possible that capital invested in the development of Alabama shall have every reasonable protection which law, sentiment and a patriotic press can throw around it, while the people should be made to feel that an intelligent and thrifty class of immigrants will bring greater blessings to the State than is possible without them. The settling among us of a farming class will bring increased value to lands and expanded trade for merchants and railroads, and this is easily obtainable if only assured of a proper reception and protection on arrival and settlement among us. This club urges upon the press of Alabama such a campaign as will accomplish these results. Let us have less of politics and more of business hereafter. On that platform all our people should stand, and if any there be who refuse to do this, let them be made to realize that they are in the path of the State's progress, and will be relegated forever to the shades of oblivion unless they speedily get out of it.

If the press and the people of the South will unite on this line—"less of politics and more of business"—determined that in extending to capital and settlers an invitation to their country, a proper reception and protection and wise and equitable laws shall be guaranteed them, the South will draw many thousands of settlers and many millions of dollars.

The business men of the South, however, in taking up this move and asking

the co-operation of the local press, must remember that a duty devolves upon them also in giving to the Southern press their most liberal support and encouragement. Live progressive papers cannot be published except in live progressive towns where the value of newspapers is fully appreciated, and where the necessity of liberal advertising is understood. If the business men of the South will give this liberal encouragement to their local papers, they may count upon the heartiest work in behalf of the South on the part of the Southern press.

Beware of False Capitalists.

The South has suffered more from the work of irresponsible parties, who have deceived the public in "paper" enterprises, than perhaps from any other cause. In connection with the present impetus given to cotton-mill building, new railroad and other enterprises in the South, the MANUFACTURERS' RECORD desires to caution the Southern people to thoroughly investigate all who claim to be capitalists or who claim to represent capitalists. A few weeks ago the attention of the MANUFACTURERS' RECORD was called to a proposed railroad. The papers in the section it was to traverse stated that it was "backed by Northern capital," and letters received at this office from prominent citizens in the towns along the route were to the effect that the Northern people had demonstrated that they were abundantly able to build the road from their own funds. Apparently the project was bona fide. A letter from the principal banker in the town where he resides to the MANUFACTURERS' RECORD reads as follows:

We understand he is more or less engaged in speculative schemes. He has a good amount of assurance, and can present a matter very plausibly. He is quite an operator in real estate in this vicinity, and is reported to have quite an amount in his name. The amount of equity there is in it is undetermined. A thorough investigation of any project he may have in hand would be judicious. If he is a capitalist, he must have accumulated very rapidly in a comparatively short space of time.

The promoter is a necessity in many undertakings, and to the active, honest promoter much of the advancement of any section must be due. The MANUFACTURERS' RECORD's advice is simply to require the highest credentials of every one seeking to bring Southern opportunities and Northern capital into connection.

Two years ago the editor of the MANUFACTURERS' RECORD suggested to Harper's Magazine that a series of articles upon the South would be a very attractive feature, and would prove of much interest to the many readers of Harper's who are not acquainted with this section. It was suggested that the motive was entirely unselfish, since the writer would not, even if requested, attempt the preparation of such a series because of lack of time, the only motive being to have made known to the world through Harper's something of the resources and attractions of the South. It is gratifying to know that this suggestion, which met a very favorable response at the time, has now been put into effect, and that the magazine has commenced a series of illustrated articles upon the South. The first, covering "The Carolinas," appeared in the January issue.

Kansas City Buying Mississippi Corn.

Mr. J. J. Richardson, of Hollandale, Miss., in a letter to the MANUFACTURERS' RECORD says:

Corn has not until this year been shipped out of the State. This year, however, Kansas City has entered Mississippi as a buyer, and a Kansas City grain house has an agent stationed in Greenville purchasing corn. As no facilities have existed here for shelling corn for the market, the Kansas City people have had to take it in the shuck. In this immediate neighborhood I think there are about 5000 bushels for sale. The price is fifty cents per bushel f. o. b., but Kansas City offers only forty cents at present. Our best farmers can average fifty bushels per acre. Corn can be raised at a cost of twelve cents per bushel, and at twenty-five cents a bushel it will pay better than cotton at five cents. If we can get small elevators at the railroad stations we will raise corn instead of cotton in this section of country.

A Voice from Texas.

The San Antonio Express is one of the Southern papers which have joined in with the MANUFACTURERS' RECORD on the Nicaragua Canal question, and are heartily advocating it. In a recent issue it comments in these words:

The people of San Antonio have expressed their sentiments to the Congressmen representing the State of Texas by means of telegrams sent through the agency of the Business Men's Club. The bill is now before the House, and should be given a clear right of way. Arguments pro and con have been exhausted, the people of the United States have signified their approval of the measure by a large majority, and the bill should go into effect at this session of Congress without fail.

Living at Home.

The Valdosta pork-packing establishment has bargained for 3000 fat hogs to be delivered next season. They will be supplied by farmers within a radius of eight miles. The price to be paid is three to four cents gross. The Valdosta Times estimates that the 3000 hogs will average 200 pounds each, and that at three and a-half cents a pound they will bring the farmers in money not less than \$21,000. The raising of the hogs will involve very little additional expense on the part of the farmers so that the cash they receive for them will be so much extra money put into circulation in the neighborhood.—Augusta (Ga.) Chronicle.

The West might as well give up the trade of supplying meat to the South. Hereafter the South proposes to keep its corncrib and smokehouse at home and grow rich on farming, just as it did before the war.

Live Young Men.

Rev. Madison C. Peters, of New York, who is interested in the organization of a winter Chautauqua at Augusta, in a letter to the MANUFACTURERS' RECORD, says:

I believe the enterprise will be a great success. Live young men are at the head of it. I have lectured within the last ten years in every part of our country, and I have nowhere met with so many pulling and pushing young men as I have met in the South. You may look for great things in the Augusta assembly. It will bring the people together from all sections of our country, and I know they will, like myself, love the South more when they know more about it.

THE Atlanta Constitution suggests that a yellow-fever congress be held in that city during the time of the exposition. The Constitution's idea is that all the yellow-fever experts of Central and South America and the West Indies should be invited to come to Atlanta and discuss yellow fever. About the time the convention adjourned every newspaper in the United States would be discussing the yellow-fever congress of Atlanta in such a way as to make one-half of the people in the country believe that the South had so much yellow fever that it was necessary to hold a convention to devise ways and means to prevent its spread. The Constitution made a mistake that time.

THE SOUTH'S CLIMATE.

Striking Comparisons from the United States Census.

In the last issue of the *Southern States* magazine the South's climatic conditions are compared with those of other sections in an article by Mr. W. H. Edmonds. The facts presented are of unusual interest. They prove by official sources what is already known to all who personally know the South, but what is almost entirely unknown to most Northern and Western people, and that is that the South's summer climate is more pleasant than that of other sections. From this article we take the following extracts:

"Of all the erroneous notions about the South that are so widely prevalent, the most nearly universal and ineradicable, perhaps, are those concerning its temperature.

"A study of official temperature statistics will show how entirely without foundation or reason this belief is.

"On the census temperature maps of the United States the country is divided by isothermal lines into sections covering a range of five degrees of temperature. On the map showing maximum temperature the following are in the same division, that of 95-100 degrees: Huntsville, Ala.; Buffalo, N. Y.; Chattanooga, Tenn.; Scranton, Pa.; Wilmington, N. C.; Bangor, Me.; St. Augustine, Fla.; Boston, Mass.; Charleston, S. C.; Minneapolis, Minn.; Louisville, Ky.; Little Rock, Ark.; Detroit, Mich.; Norfolk, Va.; Cleveland, Ohio; Pittsburg, Pa.

"In the division of 100-105 degrees are: Kalamazoo, Mich.; Montgomery, Ala.; Des Moines, Iowa; Macon, Ga.; Baltimore, Mobile, Philadelphia, Raleigh, Augusta, Washington, Richmond, Chicago, St. Louis, Memphis, Toledo, Peoria.

"The area of 100-105 degrees maximum temperature comprises a belt commencing in Massachusetts and sweeping down between the mountains and the coast through Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina and Georgia. It embraces the northern part of Florida and the southern half of Alabama, most of Mississippi, Arkansas and Missouri, Indiana, Illinois, and parts of Iowa, Minnesota and the Dakotas.

"In the 95-100 degrees division are the Florida peninsula and the Michigan peninsula, nearly all the lake country, most of New England, New York, Pennsylvania and Ohio, and the mountain and plateau regions of West Virginia, Virginia, Kentucky, Tennessee, Alabama, Georgia, North Carolina, the valley of the Mississippi, Arkansas and Red rivers in the States of Mississippi, Arkansas and Louisiana, and a narrow strip along the Atlantic coast and along the Gulf coast.

"Thus it will be seen that, allowing for a range of five degrees (95-100) it gets no hotter at any time in Southern Florida, in Southern Louisiana, in the Mississippi valley, or along the South Atlantic coast than it does on the New England coast or along the great lakes, and that in no part of the South does the thermometer ever indicate greater heat than it does at Chicago, Kalamazoo, Philadelphia and elsewhere in a territory that comprises most of Illinois, Indiana, Iowa, Minnesota, the Dakotas and parts of Connecticut, New York, New Jersey, Pennsylvania and Delaware, while in this last-named group the maximum limit is five degrees higher than in a large part of the extreme South and all of the Southern plateau region.

"The greatest heat known in this country is not felt in the South. The highest temperature known in the South, according to the census map is 105 degrees, and this maximum is reached likewise, as has been said, in Massachusetts, Connecticut, Mich-

igan and other Northern States. But west of the Mississippi river, as shown by the maximum temperature map, there is a wide belt of country, extending in length from Mexico to Canada, in which the temperature goes to 110 degrees. This belt takes in all of Kansas, Indian Territory, New Mexico, nearly all of Nebraska, Montana, Nevada, much of the Dakotas and of Wyoming, Utah, Colorado, Oregon, Idaho, together with the northwest corner of Texas and a very narrow strip of Western Missouri and Arkansas. In Arizona, New Mexico, Montana, Nevada and Idaho there are large areas in which the maximum is 115, and a part of Arizona, California and Nevada is described as 'above 115.'

"These facts and figures from official sources show that throughout nearly half the area of the South the maximum temperature is less than the maximum reached throughout nearly half of the North between the Mississippi river and the Atlantic, and a great deal less than nearly all of the West and Northwest.

"These facts, however, would mean comparatively little if it were true that this maximum heat were continuous in the South and only occasional in the North. In the South, as well as in the North, July is the hottest month of the year. If in the South the maximum heat lasted through the whole or a greater part of this month, and occurred only once in a while in the North, there would be a great difference in the mean or average temperature for the month. Let us see how the North and South compare in this regard.

"On the map showing the mean temperature for July the following cities are in the same division (that of 75-80 degrees): Atlanta, Ga.; Omaha, Neb.; Huntsville, Ala.; Cincinnati; Columbia, S. C.; Baltimore; Louisville; Parkersburg, W. Va.; Raleigh, N. C.; Des Moines, Chattanooga, Topeka, Richmond, St. Louis.

"That the heat of summer is not only nearly as great in the North as in the South, but is as continuous during the mid-summer period, has further demonstration in the daily range of temperature in July in the following Northern and Southern cities, as compiled from the latest volume issued by the United States Weather Bureau, this range differing very slightly in the six Northern and six Southern cities representing different parts of each section: Norfolk, 16.3; Charlotte, 17.5; Atlanta, 15.5; Montgomery, 17; Memphis, 16.1; Little Rock, 16; Cairo, Ill., 16; New York, 17.6; Philadelphia, 18; Des Moines, 18.7; Omaha, 19.7; Indianapolis, 19.8.

"But, extending the comparison, it may be shown further that through not only July, but the whole of the three summer months, the average temperature is not a great deal higher in the South than in the North.

"Take, for example, the normal average temperature of the following representative Southern and Northern cities for June, July and August, as compiled from reports of the United States Weather Bureau: Atlanta, 76.8; Baltimore, 75.2; Des Moines, 72.9; Little Rock, 79.3; Indianapolis, 73.4; Memphis, 79.5; St. Louis, 77; Charlotte, N. C., 76.9; Leavenworth, Kan., 75; Pittsburg, 73; New York, 72; Norfolk, 77.1; Omaha, 73.7; Chattanooga, 77.1.

"It will now be seen that in point of intensity of heat during the three summer months there is not a great deal of difference between most of the South and most of the North.

"There is a difference, however, in the length of the warm season, which in the South extends over a longer period than the three summer months. For example: The normal mean temperature for July is nearly the same in Atlanta, St. Louis and Philadelphia, the figures being, respectively, 78.4, 79.3, 76.1, but the averages for March are: Atlanta, 51.8; St. Louis, 43.2; Philadelphia, 39.0; and for November, Atlanta,

51.9; St. Louis, 44.3; Philadelphia, 45.2; from which it will be seen that warm weather begins much earlier and continues much later in the South. After the summer has well begun in the South it is still cold at the North, and while it is still comfortably warm in the former section the Northern summer, after a brief intervening autumn, has passed into winter.

"It is not to be inferred, however, that the early spring and late autumn months in the South are uncomfortably hot. Here are the March and November means for the six Southern cities enumerated a moment ago:

	March	Nov.
Atlanta.....	51.8	51.9
Memphis.....	51.8	50.8
Norfolk.....	47.2	51.2
Little Rock.....	52.6	51.3
Charlotte.....	49.9	50.6
Montgomery.....	57.6	55.6

"It is the testimony of nearly all persons who go South in summer that with the same temperature the heat is far less burdensome than at the North.

"How greatly other causes than difference in latitude affect summer temperature is shown by the facts that the southern half of Florida and Southern Louisiana and nearly all of Maine, New Hampshire, Massachusetts, Michigan and Minnesota are in the same maximum temperature division; and that while half of Florida and a considerable part of every other Southern State (in some cases nearly the whole State) are in the belt of 95 to 100 degrees of maximum temperature, nearly the whole of Montana and parts of adjacent States are in the division of 105 to 110 degrees. Between the northern boundary of Montana and the southern end of Florida there is a difference in latitude of nearly twenty-four degrees, or about 1600 miles; that is, although South Florida is 1600 miles further south than Northern Montana, it gets ten degrees hotter in the latter than in the former. * * *

"For comparisons made in this article we have taken for the most part localities in the most remote South and at lowest elevation, and we have relied not upon local records or the records of a single year, but upon the figures given out by the United States Weather Bureau as indicating normal temperature."

New Cotton Mills at Atlanta.

Mr. Jacob Elsas, president of the Fulton Bag and Cotton Mills, of Atlanta, Ga., has announced that his company will build a new mill to be equipped with 25,000 spindles, making 40,000 in all to be operated by the Fulton Company. A petition has been presented to the city council and passed, exempting the new plant from taxation for fifteen years. Dr. J. D. Turner, president of the Exposition Cotton Mills, has announced that his company will erect a new 20,000-spindle mill at once, to be devoted to the manufacture of Sea Island cotton goods. This latter plant, although announced as a new one, is probably the new addition to the Exposition Mills noted several months ago.

THE Henrietta Commercial Club, one of the most progressive organizations in Texas, has elected the following-named officers: W. H. Chilson, president; J. A. Templeton, vice-president; H. B. Patterson, secretary; C. L. Stone, treasurer. Directors, J. A. Frazar, W. N. King, J. H. Ferris, C. B. Patterson, F. L. Miller, W. H. Featherston.

A COMPANY which includes George H. Lomer as president and Ward H. Mills as managing editor has purchased the Hot Springs (Ark.) Daily Graphic. The MANUFACTURERS' RECORD trusts that the new management will succeed in its efforts to make the paper progressive and a factor in the development of its section.

CO-OPERATIVE MILLS.

A Further Discussion of the Subject.

Frequent reference has been made in these columns to the building of cotton mills on the co-operative plan. Some time ago the practicability and success of such methods were shown in an article describing a number of mills built by co-operation. Since the publication of this article more extended and serious consideration has been given the subject, and as a result the plan bids fair to become a popular form of investment for the surplus earnings of those of limited income. H. W. Finlayson, of Cheraw, S. C., takes up this subject in a recent issue of the Charleston News and Courier. While going over much of the same ground as already covered by the MANUFACTURERS' RECORD, the discussion by Mr. Finlayson is of special interest, inasmuch as it rehearses the experience of those directly concerned in carrying out an enterprise of this character and gives many details that are of value. We make a liberal abstract because of the importance and timeliness of the question. Mr. Finlayson was a member of a committee appointed to visit some of the mills in North Carolina, and report on the workings of the co-operative plan. It is interesting to note that Mr. Finlayson found many mills so built, but did not hear of any that failed to prove successful.

"The common way of going about the matter," Mr. Finlayson explains, "is to fix the stock at \$100 per share, payable \$1 weekly each share. By this means the total capital stock is paid up in full in two years. The building and equipping though is not put off for the two years, but as soon as the stock is subscribed for and, say, \$1000 is paid in, which is done in about two weeks, the company is organized, the site selected, purchased and paid for. In the majority of cases this does not require even two weeks' delay, for the purchase price of the site is taken in paid-up stock, or, better still, donated outright by the owner or the community.

"During this time other instalments become due, and the projectors are able to tell definitely about what proportion of the subscriptions can be relied upon. Seldom after the first payment does a subscriber fail to meet his payment, and when such does occur others are ready to take his place. I was reliably informed that the forfeitures were so insignificant that they were not considered, and in one instance they did not have a single one. Take as an illustration a capital stock of \$50,000; 500 shares of \$100 each must be subscribed for; this brings into the treasury \$2000 per month, the land being paid for with paid-up stock or received as a donation. At the end of the first month enough money is on hand to begin making or buying brick with which to erect the buildings, and from that time on the monthly receipts of \$2000 are sufficient to carry on the work to the completion of everything except the purchase and placing of the machinery. At the end of the first six months the locality practically has a factory, all except the equipment, and from the very first new life is infused into the business of the place, as the expenditure of \$2000 per month for labor and material counts largely in an average community that has not had any manufacturing enterprises in its midst, to say nothing of the joyful hopes that spring up in every breast at the thoughts of soon having the machinery humming. Real estate advances and is in demand, not only in the immediate vicinity, but for some miles in the country, as the farms near by invariably reap a rich harvest by having a ready market for all kinds of vegetables, poultry and other produce.

"With \$12,000 expended, the factory complete and all paid for (except machinery), it is found an easy matter to equip it,

as the shareholders have demonstrated their intention and ability to keep up their payments, and that they are really in earnest in their movement.

"The plans for equipping vary. The cost of power is usually about \$4000, and for the rest of the machinery, for a factory the size stated, about \$28,000. These figures are for a yarn mill. If looms are to be added the cost is more and the capital stock rather too small; yet a close estimate can be made and enough looms included for very little more to weave the yarns spun; and it is said that this is the better plan to pursue, for at times the yarn market is dull, and it is more profitable to weave than to sell the output, so that advantage can be taken of the market; and when the sale of the yarn is not on a profitable basis it can be converted into sheeting, which has always a ready sale. The orders for the machinery must be placed some months ahead, for all manufacturers require time to fill such orders, and are usually behind a little then; so the order for machinery can be given about the time the buildings are nearing completion, and by the time it is delivered, placed and tested some four or five months more will have passed, and \$8000 to \$10,000 accumulated in the treasury from monthly payments on stock. This amount makes a good cash payment on the purchase price of the outfit, and other payments are arranged for at a rate of \$2000 per month, or less in some cases, and the surplus kept to build up a working capital.

"Another plan is to have the directors make a note and borrow the money, pledging the property already in hand and paid for (buildings, etc.) or the monthly receipts to be collected. By this means the company pays cash for the outfit, and, of course, gets considerable advantage thereby at the expense only of the interest paid the lenders.

"At the end of the first year the factory is in operation, and then, if properly managed, has smooth sailing. One that we visited informed us that they found it necessary to call in only seventy-two of the monthly instalments, or \$72 on each \$100 share, the profits having amounted to enough to pay the other \$28 on each share. This mill, too, was in a section that produced but little cotton, and was drawing on South Carolina towns for its raw material, paying at that time for cotton delivered about one cent per pound, or \$5 per bale, more than it could have been obtained for by mills had they been where the cotton was, and this was not an exceptional case; so that factories located in a good cotton section, where the staple may be had direct from the producers, and all the year round, would have an advantage of about \$5 per bale over some of the up-country ones to begin with—a nice profit within itself.

"And if these companies succeed and make money with such odds against them, the contemplated ones at the cotton towns in South Carolina ought to flourish beyond question.

"Now as to active working capital, very little is needed; it is, of course, best to have it and all possible, but a company limited in this respect can manage in a cotton region to get along with very little; it can, in fact, be run with only enough to buy a few days' supply of cotton, as the output can be shipped and drawn upon daily. Another advantage the majority of South Carolina towns have is that no large amount of money is required to lay in several months' or a year's supply of cotton. This cotton fund mills located away from cotton regions have to have, or they have to use bank money to carry cotton, and, in addition to the risk of fluctuations in the market value, have the expense of interest and insurance, which is considerable on enough cotton to run them several months. It is true they, too, can buy daily, but this is expensive, for at certain seasons of the year they have

to go to the ports to get enough to do them, and on this they pay the expense of transportation to and expense on the cotton profits to the holders, and in addition to all this transportation charges back to them.

"The labor question was also looked into, and we learned that common farm labor gives the best satisfaction in these small country mills. The reasons assigned were that the 'factory labor' is of a roving disposition, and people taken from the immediate vicinity soon learn the business and have family ties and other local cords to bind them to 'home,' so that they strive hard to give satisfaction and come nearer doing it than imported people. Of course, trained heads are required to manage, but new hands so soon learn and are advanced that really after a few weeks' time the experienced manager or superintendent is the only one the owners are dependent upon or that needs have served his time at the business.

"These instalment mills, we further learned, have made all the way from 10 to 35 per cent. Again, they help in another way. We were shown one place where the superintendent, without interfering in the least with his other duties, had a few hands employed on his own account in an adjoining building engaged in the manufacture of towels, bed-spreads, etc. Purchasing his yarn from the mill in which he was employed, and beginning in a very small way, he had enlarged this side affair and his annual net income from it was said to be about \$5000. This is included as an illustration of the possibilities springing from a factory in any place. The factory itself is a good thing. The smaller industries that it makes possible ought not to be lost sight of, and they almost invariably cause these to start up.

"In one place we visited we learned that real estate had increased from 50 to 700 per cent., and all as the result of one lone little factory. A lot was cited us that could have been bought for \$200 before the enterprise was started. It sold within two years for \$1400. New people moved in, not only operatives, but carpenters to work on buildings to rent to the hands, brick-masons, boarding-house keepers, a new doctor, a lawyer, possibly thirty-five families, within a few months, exclusive of those that found work in the mills, but who found employment in the little town as a result of the enterprise being started. I asked particularly as to the stockholders, original subscribers to the capital stock, and learned that they were home people—that self-help was called upon and responded.

"I had an idea, which is common, that these people had started the movement, taken enough of the stock to show an interest, and that 'Northern capital' had been called into requisition, and balance placed away from home.

"I learned that only \$2000 of the \$50,000 was taken away from home, and that was purely voluntary, and had been bought back the first year by home people.

"One other thing, after these small mills are started it is easier to double the capital stock and make a \$50,000 factory one of \$100,000 than to raise the first \$5000.

"The success of the business is assured, and the capacity can be doubled for \$25,000 additional, so many things there are that do not have to be duplicated answering the purpose of a \$100,000 outfit as well as one for one-half the amount, so that when the capital stock of a company is doubled it means more than 100 per cent. increase.

"We were cautioned along this line, and advised by all to plan buildings, grounds, power and other things so as to be able to increase to best advantage and at tremendous saving in cost when the time for enlarging arrived, as we were assured it would speedily. The mill people in the sections visited did not talk 'hard times.' When asked which was their dull season they said they had none. They impress a close observer as a contented tribe, except that they are planning always for enlarging their plant or providing a new one."

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 61.]

A Railroad "Boycott."

A dispatch from Atlanta announces that Commissioner E. B. Stahlman has announced that the traffic relations of the Southern Railway and Steamship Association with the Seaboard Air Line will be suspended after March 1. For nearly a year differences have existed over the management of this body. It is claimed that Commissioner Stahlman's policy has not been impartial, and that he has made rates favorable to some of the lines in the association and unfavorable to others. The Seaboard Air Line has not deemed it advisable to enter the association under its present management, although working in harmony with it. For this reason, presumably, Mr. Stahlman has not maintained a friendly attitude towards it, despite the protests of allies of the Seaboard who are members. So much dissatisfaction has been caused that last fall several companies announced their intention of leaving the organization. Meetings were held at Atlanta, Baltimore and New York to endeavor to restore harmony, but without success. The last was held at Atlanta only a few days ago, but so few of the Southern trunk lines were represented that railroad men generally admit that the association as a passenger and freight regulator has outlived its usefulness, and that it will soon become "a thing of the past." Consequently, the action of its executive head is not considered as very serious. The principal lines which have dropped out are the Queen & Crescent, Louisville & Nashville, Nashville, Chattanooga & St. Louis, Western & Atlantic, Knoxville & Cumberland Gap, Georgia Southern & Florida, Memphis & Charleston, South Carolina & Georgia and the Georgia Railroad.

Railway officials are of the opinion that a new association will be formed on a basis which will be agreeable to all the Southern lines, with another commissioner at its head. This was intimated by the MANUFACTURERS' RECORD several months ago.

Prest. R. C. Hoffman, of the Seaboard Air Line, informs the MANUFACTURERS' RECORD that he is at a loss to know why a "boycott" has been declared. He is not aware of any "irregularities," as stated in the dispatch, which have been confirmed, and states that thus far he has received no official notice from the association of any action against his line.

A New Railroad for Fernandina.

[Special Cor. MANUFACTURERS' RECORD.]
FERNANDINA, FLA., February 16.

A very enthusiastic mass-meeting was held last night in the opera-house to hear reports of local committees, which had been conferring with other committees from Savannah, Augusta and Valdosta to decide on the route of the proposed new railroad, and to appoint an executive committee to take charge of all matters relating thereto. Speeches were made by the leading citizens favoring the building of a road from Fernandina to Valdosta, Ga., to connect with the South Florida & Western and Georgia Southern & Florida. To show that the people of Fernandina are in earnest, they pledged themselves to build ten miles of this road themselves if necessary. Valuable terminals, lands and rights of way have been secured, and Fernandina is now prepared to commence its end of the line. It is understood that citizens of Valdosta will build from Valdosta to Alexandria, and some wealthy naval store and lumber men will complete the road from Alexandria to connect with the Florida Central & Peninsular Railroad to Fernandina. There seems to be no doubt of the building of this road, as everything has

been subscribed, and funds are not on paper, but are now in hand. This road would prove of great value to Fernandina, as it would bring immense shipments of lumber and naval stores, as it taps a section said to contain the best virgin yellow pine and cypress timber tracts in the South. The anticipated building of this road has already decided a number of millmen, fertilizer manufacturers and other large industries to locate here as soon as completed. Already real estate has taken a decided turn for the better, many inquiries being received every day, and I am informed by the president and resident manager of the Fernandina Development Co., E. D. Lukenbill, that the MANUFACTURERS' RECORD is a powerful factor in this direction. A large business hotel is to be built on Centre street, in the business part of the city, at a cost of about \$25,000, the funds being now in hand.

Fernandina is situated two and a-half miles from the Atlantic ocean, on Amelia Island. It is a very important South Atlantic shipping port, doing a very heavy export business in lumber and phosphates. It offers exceedingly liberal inducements to manufacturers and safe investments for the capitalist. The Florida Central & Peninsular car-building and repair shops, three large canning factories, fibre and creosote factories and shingle mills are located here, and are in successful operation.

I. S. FIELD.

More West Virginia Lines.

A report from Cedar Grove, W. Va., states that the timber and coal lands along Kelley's creek, in that section, are attracting much attention from investors. The coal belt is several miles wide, running from northeast to southwest, and extends from a point about Braxton C. H. to near Boone C. H., and embraces all of Kelley's creek, from head to mouth, and also the headwaters of Blue creek, Campbell's creek, Bell's creek and Huges creek. C. C. Lewis, of Cedar Grove, and George S. Couch, of Charleston, have completed six miles of road along the valley. D. D. Ward, of Detroit, Mich., has graded five miles of line, which he will complete in a few months. J. G. Tompkins and G. S. Couch are also building a short spur to Frozen branch, a feeder of Kelley's creek. Among the coal companies opening mines in this vicinity are the Big Mountain Mining Co., Cedar Grove Mining Co., Staunton Coal Co. and Kelley's Creek Improvement Co. The railroad lines are feeders of the Kanawha & Michigan line.

Business of the Northern Central.

The report of the Northern Central Railway Co. for the year ending December 31, 1894, shows total earnings of \$6,031,260.69, a decrease of \$850,545.55. To offset this decrease expenses were decreased \$529,039.72, making net earnings \$1,797,144.21, or a decrease of but \$321,505.83 from 1893. Considering the general falling off in business during 1894, this report indicates that the Central has been economically managed. It is a very creditable showing for the company. The Northern Central is one of the comparatively few lines of the country which always pay regular dividends. During the year nearly 4000 tons of steel rails were laid and eight locomotives added to the rolling stock. The detailed report published elsewhere gives full particulars of the operation of the company.

A Coast Line Addition.

The Charleston, Sumter & Northern is now a part of the Atlantic Coast Line system. It was sold at Charleston to representatives of the Coast Line for \$450,000. The latter has owned a large portion of its bonds and will operate it. The Charleston, Sumter & Northern is 150 miles long, extending from Pagnalls, S. C., to Gibson,

N. C., and from Vance's Station to Harlin City, S. C., with a six-mile branch.

Georgia Central Reorganization.

Several weeks ago the MANUFACTURERS' RECORD announced that the plan for reorganizing the Central Railroad of Georgia was nearly completed and that a syndicate to underwrite the new securities had been formed. The principal features of the plan were published at the time. According to New York advices, the plan will be formally made public at an early day. The only cause of delay has been the perfection of the committee's plans for underwriting the scheme. It is believed that this branch of the work is now satisfactorily arranged. The delay has been of benefit to the plan, if anything, because it has made available for the reorganizers a better knowledge of the earnings of the properties under the new conditions among the Southern railroads than could have been had at the end of the fiscal year 1894.

Railroads and the Exposition.

One of the features of the Atlanta Exposition is to be a railroad exhibit. Mr. George M. Pullman has notified the exposition authorities that he will exhibit in Atlanta the finest train of cars that has ever been made. The train will consist of dining car, sleeper, observation car and chair car. It will be built at the Pullman (Ills.) shops especially for the exposition. The Southern Railway will make a display. Besides a handsome train of cars, it will exhibit one of its best locomotives. The Chicago & East Illinois Railroad and the Evansville & Terre Haute Railroad will combine in making a handsome exhibit of rolling stock.

Want to Complete the Road.

The stockholders of the Ohio River & Charleston have been called to meet at Johnson City, Tenn., April 10, to consider a bond issue of \$15,000 per mile to complete its line in South Carolina and Tennessee. Samuel Hunt is president.

Dealing with Railway Employees.

The Southern Railway Co. has, in several instances since its formation, given ample evidence that its executives are men of extremely broad and progressive ideas. The last instance has been shown in their consultation with their employes on the question of wage adjustment. As the New York Times well says, "the company has set a good example to all corporations engaged in the railroad business in making a candid statement of the condition of its business in reply to a demand for the restoration of the scale. The company frankly recognizes the unions and addresses the statement not only to the engineers, firemen, conductors and trainmen in its employment, but to the joint committee of their several organizations. After stating the reductions made upon the lines which have come under its control, it gives a table showing the decrease in gross and net earnings since 1891, when the schedule was adopted which the men wish to have restored. The spirit displayed in this method of answering the demand of the workmen is most commendable, and is calculated to prevent antagonism between them and the employing company. We shall be surprised if it is not accepted as both conclusive and, under existing circumstances, satisfactory to the men."

Many corporations in dealing with the wage problem do not seem to recognize the fact that their employes have reason and judgment and are open to argument like other people. The MANUFACTURERS' RECORD hopes that the principle instituted by the Southern will be followed by other railway companies, as well as corporations in general. Less would then be heard about strikes and lockouts.

A LARGE POWER STATION.

The City & Suburban Railway Co.'s
\$500,000 Plant in Baltimore.

The City & Suburban Railway Co., of Baltimore, is building a power station which is one of the largest in the United States. The MANUFACTURERS' RECORD in this issue gives some of the specifications which will furnish an idea of its size. The building, which is located at Pratt street and O'Donnell's wharf, is of brick, with stone foundations and trimmings and iron-truss roof. It is 200x132 feet, and thirty-five feet high in the clear, the highest point of the roof being sixty feet from the ground. In order to secure a foundation for the massive machinery it was necessary to make a sub-foundation of piling, which was covered with concrete, and upon this was placed the beds of masonry for the engines, boilers, etc. The station really consists of a basement, in which are built the fly-wheel pits, and the first floor, which is to contain the lighter apparatus.

The steam and electric equipment, according to experts, is not surpassed by any in this country. The main engines are of the McIntosh & Seymour type, and are of 850 horse-power each. For the present four only will be installed, three for steady service and one for a reserve, making 3400 horse-power, although the station is large enough to contain two more, giving it a maximum capacity of 5100 horse-power from its main engines. The three steady-service engines are belted to three 500-kilowatt General Electric generators, which will produce a current ample to operate every motor car now running on the City & Suburban and Lake Roland Elevated systems in ordinary weather, or to quote figures, 150 cars using sixteen to twenty horse-power each. A Baltimore firm, the Campbell-Zell Co., supplies the boilers, which are eight in number, each of 350 horse-power. They are of the water tube pattern and provided with the Roney patent stoker or fuel feeder. By a Hunt conveyor coal is supplied from the fuelroom to these stokers, which automatically do the work of firemen in "coaling" the furnaces. By the conveyor system all ashes are also removed by machinery. The coal will be received into the fuelroom from barges by means of the conveyor also, and the plant has storage room enough to keep a month's supply on hand. By the employment of these devices it is calculated that the work of twelve or fifteen coal-handlers or firemen is done automatically, and that amount of weekly expense saved.

In addition to the main power, an auxiliary McIntosh & Seymour engine of 250 horse-power is to be installed with a 200-kilowatt generator of the General Electric type. This is for night duty, for lighting the building and for operating snow sweepers, etc., when the main plant is not in operation. The steam plant is being put in by the Pierson & Miller Engineering Co., of New York, who represent the McIntosh & Seymour Co. A feature of the station is the stack system. It has two steel smokestacks, each 150 feet high and nine feet inside diameter. These are lined with fire-brick.

The following gives the principal statistics of the plant:

Total capacity (horse-power).....	5,350
Present installation (horse-power).....	3,650
Main engines (horse power).....	3,400
Auxiliary engine (horse-power).....	250
Total generating capacity (kilowatts).....	2,250
Present installation (kilowatts).....	1,700
Main plant (kilowatts).....	1,500
Auxiliary plant (kilowatts).....	200
Cost (including building and site).....	\$500,000

The City & Suburban Railway Co. is one of the four principal systems of Baltimore. It controls and operates about eighty-five miles of electric and horse-car lines, including the Lake Roland Elevated electric lines recently purchased. Nelson Perin, who is president of the company, has been the principal in organizing and developing the present system.

A Railway Curiosity.

Work is about to begin on a railroad in Florida which is a curiosity of its kind. Some time ago the citizens of Avon Park and Haines City, Fla., believed that a transportation route connecting them would be of great advantage. The country is sandy and nearly level. A company was formed, but the people lacked in capital what they made up in enterprise. It has been decided, so the MANUFACTURERS' RECORD is informed, to build the road with wood rails, which are large enough to be laid so that they will be half imbedded in the sand, without other ballast. They are to be held in position by wooden pins two inches in diameter and eighteen inches long, while the ends are connected by plank couplers placed underneath and held by pins. Not a pound of metal will be used in construction of the track, although the line will be forty miles long. Most of the "rails" will be furnished gratis by property-owners along the right of way. The company believes that in a few years the fruit, vegetable and passenger business over the route will pay for regular steel rails, when the others will be used for ties. A small steam dummy will furnish power for the Avon Park & Haines City road.

A Novel Engine.

J. R. Pearce, foreman in the shops of the Kansas City, Memphis & Birmingham road at Amory, Miss., has designed a steam engine which has no eccentrics, cranks, crosshead nor piston-rod. The power is applied directly to the driving shaft of the machine intended to be operated by the engine. The points claimed in its favor are a saving of power and economy of construction, as experts state that it can be built at one-fourth the cost of the modern steam engine. Mr. Pearce has secured a patent on the invention.

Railroad Notes.

EX-GOV. JAMES HOGG has been appointed general solicitor of the Trinity, Cameron & Western and Georgetown & Granger Railroads.

C. L. LOOP has been appointed traffic manager of the Southern Express Co. He has been auditor of the company at Memphis.

BRADFORD DUNHAM has been appointed general superintendent of the Plant railway and steamship system, with headquarters at Savannah.

GENERAL MANAGER E. T. HORNE, of the Macon & Northern, has resigned. He was formerly superintendent of the East Tennessee, Virginia & Georgia at Macon.

PRESIDENT R. C. HOFFMAN, of the Seaboard Air Line, has been elected a director of the Old Dominion Steamship Co. of New York, in which the Seaboard is interested.

THE Baltimore & Ohio has begun running freight trains through its recently-completed tunnel in Baltimore. This saves transferring the cars across the harbor by ferryboat.

REPRESENTATIVES of railway and steamship lines in the city named have formed the Baltimore Traffic Association. J. C. Whitney, of the Merchants & Miners' Transportation Co., is chairman, and F. W. Hancock, of the Cromwell Steamship Line, secretary.

THE United States Express Co. has entered into an agreement with the Baltimore, Chesapeake & Atlantic Railway Co., by which the express company will extend its line to all the steamboat routes controlled by the Baltimore, Chesapeake & Atlantic Railway on the Eastern Shore of Maryland.

AT the annual meeting of the Georgia Southwestern Railway stockholders, held in Macon, the following directors were re-elected: W. T. Wilson, W. G. Raoul, J.

F. Mims, B. A. Denmark, W. R. Cox, Marsh Johnson and John S. Baxter. The directors then re-elected the old officers as follows: R. T. Wilson, president; John S. Baxter, vice president. The Southwestern is a part of Georgia Central system.

THE Cleveland, Cincinnati, Chicago & St. Louis Company has published an official directory of its lines, which will be of value to merchants generally from the fact it affords a correct directory of the furniture manufactories, lumber dealers, grain dealers, commission merchants, iron foundries, along the lines of the Big Four and the Chesapeake & Ohio roads. The book is neatly gotten up and gives a complete list of manufacturers and merchants on the two lines.

AT the annual meeting of the Darien & Western Railroad Co., which has recently completed a line from Darien, Ga., to a connection with the Florida Central & Peninsular system, the following officers were chosen: President, W. F. Cochran, of New York; vice-president, Walter G. Morse, of New York; treasurer, George D. Mackay, of New York. Frank M. Baker, the general manager of the line, says the outlook for the road is very bright. Regular passenger trains will be put on in a few days.

Machinery Wanted—The Result of Advertising.

CROWLEY, LA., February 13.

Editor *Manufacturers' Record*:

We are in need of the following machinery: An outfit of one battery, two boilers eighty horse-power each, with half-arch front, and one engine, 125 horse-power, for running pumping outfit; this machinery to be delivered f. o. b. at Crowley and first-class in every particular, with all attachments and everything necessary to put it in perfect running order; also want one eighty horse-power boiler, half-arch, and one sixty horse-power engine, all complete same as first mentioned; all to be delivered within the next sixty days. The machinery is for running pumping outfit or irrigating plant.

We are having a big crowd of land-seekers. We have before us twenty or twenty-five letters which have come in during the last few days, most of them beginning, "we read your ad. in the MANUFACTURERS' RECORD or *Southern States* magazine," or "we got your name by reading the MANUFACTURERS' RECORD or *Southern States*." W. W. DUSON & BRO.

A GENEROUS act always appeals to the heart. If one is not generous himself he likes to see it in another. The Herald mentioned the other day the fact that Georgia citizens had responded to the cry of distress in Nebraska, and had sent a trainload of provisions to relieve the immediate needs. The cause of the distress in Nebraska is the failure of the corn crop, which averaged six bushels to the acre over the whole State. In 1893 Nebraska raised 157,000,000, while in 1894 the crop was only 13,000,000 bushels. The question of relief was started by Mr. R. H. Edmonds, editor of the MANUFACTURERS' RECORD, of Baltimore, Md. He suggested that trade organizations in the Southern cities take up the matter of relief, which they did, and the result was that a solid train of supplies was sent from Atlanta, Ga., valued at \$15,000. Another solid train will go from New Orleans in a day or two, making about \$50,000 worth of supplies sent out from the South. The Herald takes off its hat to Mr. Edmonds, and suggests that his example be imitated.—Columbus (Ind.) Herald.

THE Charleston (S. C.) Chamber of Commerce has elected as president Thomas R. McGahan; first vice-president, George B. Edwards; second vice-president, John R. Read; secretary and treasurer, St. John P. Kinloch.

FINANCIAL NEWS.**New Financial Institutions.**

O. F. Dorrance, it is stated, intends establishing a bank at Waldo, Fla.

The McCreery Land & Investment Co., of Columbia, S. C., has been incorporated. A bill has been introduced in the North Carolina legislature incorporating the Wake Banking & Security Co.

The English-American Loan & Trust Co., of Atlanta, Ga., has established a branch at Birmingham, Ala.

C. W. Fox and H. V. Quackinbush have established the Fruit Growers & Manufacturers' Bank at Tallapoosa, Ga.

D. H. Traxler, of Timmonsville, S. C., is endeavoring to organize a \$250,000 insurance company at Greenville, S. C.

A bill has passed the North Carolina legislature incorporating the North Carolina Mutual Fire Insurance Co. of Charlotte.

The Citizens' Loan Association has been organized at Jacksonville, Fla., with B. F. Dillon, president, and P. A. Dignan, secretary.

A building and loan association has been organized at Piedmont, S. C., with W. H. Penney, president, and J. E. Tice, secretary and treasurer.

A charter has been granted to the Georgia Land & Title Co., of Macon, with Geo. A. Smith, R. A. Nisbet, C. M. Wiley and others as incorporators.

The Suburban Building & Loan Association has been organized at New Orleans, La., with R. J. Goebel, president, and Henry Sparr, treasurer.

The Farmers and Merchants' Bank of Louisburg, N. C., has completed its organization, with William Bailey, of Raleigh, N. C., president, and J. S. Barrow, cashier.

The Adams Credit Co. has been chartered at Hagerstown, Md., by J. R. Adams, Geo. R. Hunter, A. C. Small and others. The company will do a commercial investigating and collecting business and has a capital stock of \$25,000.

The Title Abstract Co., of Norfolk, Va., has been chartered with R. B. Tunstall, president; Joseph T. Allyn, vice-president, and Hugh C. Davis, secretary. The capital stock is to be not less than \$15,000 nor more than \$25,000.

A charter has been secured by the Monarch Fire, Marine & Life Insurance Co., of Alexandria county, Va. William Small, of Washington, D. C., is president. Thomas L. Cockrell is appointed agent at Alexandria, Va. The capital stock is \$300,000.

New Bond and Stock Issues.

Pulaski county (Tenn.) has applied to the State legislature for authority to issue \$20,000 of bonds.

The issuance of \$100,000 of 30-year 4 per cent. bonds for public improvements is being discussed at Atlanta, Ga.

A bill has passed the senate of the Tennessee legislature authorizing Sevier county to issue \$30,000 of courthouse bonds.

The city council of Fredericksburg, Va., has taken steps looking to the floating of bonds bearing interest at not more than 5 per cent. to redeem \$30,000 of 10-30 year 6 per cent. water bonds outstanding.

The bill introduced in the Tennessee legislature amending the act incorporating the city of Knoxville by authorizing the issuance of \$400,000 in bonds for the purpose of securing water works has been rejected.

The proposition to issue \$130,000 of bonds for public improvements will be submitted to a vote of the people of Macon, Ga., on April 11. The bonds, if issued, are to bear interest at a rate not more than 4½ per cent.

Augusta, Ga., is offering for sale \$88,000 of 30-year 4½ per cent. redemption bonds. The proceeds are to be used to redeem outstanding 7 per cent. bonds. The total bonded debt of the city is \$1,750,800, with

no floating debt. Augusta has a population of 40,000, and the real and personal taxable values aggregate \$22,504,000. The city's assets consist principally of the Augusta canal, which furnishes 14,000 horsepower, of which about 11,000 are in actual use. The canal cost about \$1,500,000, city water works \$600,000, and the city real estate has a market valuation of \$210,000, a total of \$2,310,000. The income of the city in 1894 from canal water rents was \$50,000, and from city water works \$45,000, a total of \$95,000. It is expected that the income from these sources will in a few years be sufficient to meet the interest charges on the whole public debt.

Interest and Dividends.

The Fort Mill (S. C.) Manufacturing Co. has declared a semi-annual dividend of 4 per cent.

A dividend of 5 per cent. has been declared by the Title Guarantee & Trust Co. of Chattanooga, Tenn.

A semi-annual dividend of 4 per cent. or \$1 per share has been declared by the Mutual Loan & Building Co. of New Orleans, La.

Financial Notes.

A BILL has passed the North Carolina legislature making 6 per cent. the legal rate of interest.

THE corporate existence of the First National Bank of Mayfield, Ky., has been extended until February 15, 1915.

E. LESLIE SPENCE has been appointed general agent at Richmond, Va., for the Fidelity & Deposit Co. of Maryland.

THE consolidation of the Boyle National Bank, capital \$200,000, and the Central National Bank, capital \$150,000, at Danville, Ky., is proposed.

THE stockholders of the First National Bank of St. Augustine, Fla., have decided to reduce the capital stock of the bank from \$100,000 to \$60,000.

THE Bank of Lexington, Va., has suspended business. The cashier is reported as absconding after swamping the bank's capital of \$60,000, and in addition \$65,000 belonging to depositors.

THE annual report of Mayor H. T. Duncan, of Lexington, Ky., shows that at the close of the fiscal year there was a net balance in bank to the city's credit of \$58,211, with no indebtedness outstanding.

Another Georgia Enterprise.

A party of Western people have organized what is termed the Indiana Fruit Co., and have secured nearly 1000 acres of land in the vicinity of Montezuma, Ga. While the company expects to engage in fruit-growing extensively, and has already planted peach and pear trees on 125 acres, it proposes to engage in manufacturing also, and intends erecting a crate factory, fruit-packing plant, cotton and cotton-oil mills, a grist mill and a fertilizer factory. In this way it can make use of all the products of its land. The capital is \$100,000. Among those interested are Charles T. Kramer, B. F. Nyeswander and A. D. Maxwell.

Editor *Manufacturers' Record*:

I note with some interest in your issue of February 8 a letter from Mr. Eugene Davis, in which he states that pig iron can be made at La Follette, Tenn., for \$5 per ton. I question the correctness of the estimate. While I have personally visited only a portion of the county in which La Follette lies, I feel quite safe in saying that this statement will never be realized.

Will not Mr. Davis publish in your columns an abstract of the reports which have been made on the property, and give further information regarding it? If he will do so, we will be able to criticize his cost estimate more intelligently.

SOUTHERN IRON.

SOUTHERN TEXTILE INTERESTS.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on pages 60 and 61.]

The South and What It Has Done.

ROCKINGHAM, N. C., February 2.
Editor *Manufacturers' Record*:

In your February 1 number of the *MANUFACTURERS' RECORD* you take the Worcester Spy to task for saying: "Self-congratulations for the South rather than pity for the North is in order, now that some of our manufacturers have decided to invest money there. The South could never manufacture cotton without such outside help." This is certainly complimentary for the South. Then in your article on same page, "Beware of Possible Danger," you say: "This change means that the South, with unequalled natural advantages for cotton manufacturing, backed by the capital of New England, is going to become the world's textile-manufacturing centre"—complimentary for the South again. The South, both you and the Spy seem to think, can do nothing without New England capital or New England brains. A few years ago Mr. Edward Atkinson, of New England, told us the South was unsuited for the manufacture of cotton, and all New England believed him and rejoiced.

The South continued to build cotton mills, and have demonstrated to the world that the great New England authority was mistaken. This they have done without New England capital or New England brains. After this demonstration with Southern capital and Southern brains, New England capital and brains have become willing and anxious to invest in the South, but they now claim that it is on account of longer work hours allowed in the South—another pretext. We are willing for New England capital, brains and machinery to come South if they wish to come, but we hope it will be new machinery—none of their old machinery is desirable; or we are willing for them to remain in New England if they prefer, and we will show them that the South can and will manufacture cotton unaided by outside help, high protective tariffs, etc., and we are not going to confine ourselves to manufacturing cotton. Come now, "give the devil his due;" don't try to make the world believe the South has neither brains enough nor capital to manufacture cotton. Capital is rather scarce, we will admit, but we believe men, plenty of them, can be found South who can and will become competent manufacturers.

In our county there are some six or eight little cotton mills, all too small for the best, but all have been fairly successful, and some quite successful without being "backed" by a dollar from New England or by New England brains. R. L. S.

We believe that the writer of the above letter is the same gentleman who got so mad with the *MANUFACTURERS' RECORD* several years ago because of its protective tariff sentiments that he denounced it as an enemy of the South, "a Judas in disguise," seeking under the plea of friendship to convert its people to protection, which, according to his idea, meant republicanism; hence, he refused to continue his subscription. We welcome him back to our list. But the letter that brings his subscription also brings this criticism that the *MANUFACTURERS' RECORD* fails to give the South due credit. If the *MANUFACTURERS' RECORD* has not given the South full credit for what it has accomplished, we might as well quit. The fact is, most people have accused the *MANUFACTURERS' RECORD* of claiming for the South all the energy and brains of the country.

If New England capital is now to be added to what the South itself has done, it simply means a bigger development than any part of this country has yet seen. However, we willingly give space to the criticism.

Cotton Prospects.

A special cotton-mill circular issued by Latham, Alexander & Co. shows that the amount of cotton marketed from September 1 to February 15 was 1,888,690 bales more than last year, 2,717,974 bales more than in 1893, and 658,207 bales more than in 1892. The United States consumption is 567,610 bales more than last year and is the largest consumption on record. The exports of this season's crop are the largest ever known, being 1,098,335 bales more than last year, 1,952,944 bales more than in 1893, and 801,787 bales more than in 1892. Latham, Alexander & Co. say:

"On the basis of a 9,500,000 crop the stocks at the mills and ports of Europe on September 30 will be about 650,000 bales of 400 pounds larger than at the opening of the season, and about 230,000 bales larger than the 'record' figures touched in 1892. They also show that, as compared with the rates which ruled in the last-named year, present prices are mainly depressed, owing, doubtless, to the miserable condition of trade in America and to the more or less hopeless feeling which pervades nearly every branch of business on this side; and until some improvement takes place in what is called 'the state of trade' the cotton industry is not likely to experience anything in the shape of a 'boom.' All the same, it is improbable that we shall witness any further important declines in values, and it is just possible that an advance may be seen sooner than is just now expected. It should be borne in mind that the bulk of the cotton crop is marketed and financed; that the holders of the 'visible supply' have no need to become pressing sellers, and that the balance of the crop will not be forced on the market. It should also be noted that the present prices of cotton are undoubtedly below the cost of production, and that the rate of consumption is far and away the largest on record."

The South Needs Bleacheries

A dispatch from Fall River says: "Manufacturers in general in the city are exercised about the matter of Southern competition at the present time. The Fall River Bleachery is receiving goods for bleaching manufactured in the South and billed from Augusta, Ga. The Algonquin Printing Co. is preparing Southern goods for the market on order every day, and large shipments of goods in the gray have been made from Southern points to the American Printing Co. Goods known as 68x72s, 60x56s and other goods made in this city are now made South and are actually shipped to this city for bleaching and printing, while mills that would like to make these goods in this city are compelled to hustle for orders. A broker in this city, whose information is always reliable, states that a former customer of his who purchased 9000 pieces of goods weekly in this city within two years, has been since that time purchasing all of the goods from Southern mills. These goods are prepared for the market in this State, and are then reshipped to the South and West and sold at an advantage greater than New England goods appear to have."

Another Mill in South Carolina.

Mr. T. C. Duncan, president of the Union Cotton Mill, of Union, S. C., writes the *MANUFACTURERS' RECORD* that his company expects to begin the building

soon of another cotton mill larger than the company's present plant. The latter contains 10,762 spindles and 350 looms, and is running to full capacity.

New Mill at Charlotte.

The directors of the Highland Park Manufacturing Co., of Charlotte, N. C., have decided to erect a mill for spinning their own yarn, which they have heretofore been purchasing. The company is now operating 500 looms on gingham, and intends to expend \$125,000 on a plant of 10,000 or more spindles. Mr. Vinton Liddell is president.

Yes, It Is Folly.

Those of the New England cotton mill owners who have smiled for some years at the thought of Southern competition are growing serious over it. They have become aware that their Southern competitors can obtain an abundance of capital and of labor, can get as many skilled operatives from the North as may be needed, can manufacture the finer grades of goods, and can market both the coarse and fine grades more cheaply than they can be marketed from New England. Some of the Northern mill owners who had established branches in the Carolinas and Georgia are transferring their plants to these States because of the superior facilities obtainable there.

The truth is that the change, which began in a small way a few years ago, has steadily increased in magnitude, and has become a matter of gravity more especially for Massachusetts and Connecticut. It is folly to try any longer to belittle that change.—*New York Sun*.

Probabilities of a Cotton Mill at Shreveport, La.

[Special Cor. *MANUFACTURERS' RECORD*.]
SHREVEPORT, LA., February 18.

Through the work of the Board of Trade and the Development Club of this city, aided by the citizens, Shreveport is seeking a cotton factory and other industries. The subject has been well canvassed, circulars have been issued, and the metropolis of Northwest Louisiana is now bending its energies to this end.

Shreveport is a city well adapted to a cotton mill. Secretary Hawkins, of the Board of Trade, stated to me that the city handled 100,000 bales of the finest of cotton every year, the cost of which to a mill located here would be at least \$5 a bale less than in New England. Coal can be purchased at \$2.25 to \$2.50 per ton; good white labor is plentiful, without danger of strikes or kindred troubles; freight rates are low by river and the four railroads which tap the city, and every new industry has ten years' exemption from taxes. It is quite apparent that a cotton mill is needed to consume the raw material, and that other industrial plants will come before the end of 1895.

The city enjoys some unusual advantages. Its territory is large, and a gratifying jobbing trade has been built up in dry goods and groceries, the gross annual trade reaching nearly \$10,000,000, exclusive of cotton. I am informed that the local wholesale and jobbing trade alone would consume the product of a large cotton mill if located here, and general markets can be easily reached elsewhere.

The city finances are in excellent condition, Mayor Vinson informing me that a tax of thirteen and a half mills upon an assessed valuation of \$3,250,000 paid all the expenses of the city government, the real value of the property, real and personal, being fully \$15,000,000, thus making the actual tax rate only about three mills. There has been a steady reduction on the rate of thirteen and a-half mills for the past four years, and comparatively few cities can make a better showing.

From my observation the city would readily support a 25,000 to 40,000-spindle

mill, and would give such a plant financial support.

I found some splendid deposits of shale clays around Shreveport, which are very valuable for making vitrified paving brick. Experts have pronounced this clay equal to any in the country for this purpose. Steps are now being taken to organize a company to develop these clays.

FREDERIC J. COOKE.

Textile Notes.

A \$300,000 cotton-mill company is proposed at Elberton, Ga., and Col. T. M. Swift is interested.

MR. W. D. REYNOLDS, of Elizabethtown, Tenn., is now placing the machinery for his proposed hosiery factory.

A REPORT says that an experienced millman contemplates building a cotton mill at Cedar Bluff, Ala., to be operated by water-power.

A PLAN is afoot for the organization of a cotton-mill company, payment for stock to be made on the instalment plan. Mr. George S. Mower is interested.

A DISPATCH from Paris, Texas, says that an Arkadelphia (Ark.) party is prospecting with a view of building a cotton mill in Paris. A \$100,000 stock company is proposed.

THE Richland Cotton Mill Co., of Columbia, S. C., has placed its order for revolving flat cards and drawing frames with the Pettee Machine Works, of Newton Upper Falls, Mass.

THE Galveston (Texas) Bagging Factory, which shut down in December last for the purpose of making extensive repairs to the machinery and plant, is ready for business and has resumed operations.

MR. J. E. DUVAL, of Charlotte, N. C., electrical engineer and contractor, has recently closed contracts to equip the Enterprise Manufacturing Co.'s mill at Coleridge, N. C., with an electric-light plant.

CHOCOLOCCO CREEK, about three miles from Munford, Ala., affords a good water-power, and it is proposed to erect a cotton mill on same. Mr. Geo. W. Chambers, of Talladega, is now trying to organize a company.

MR. HENRY C. LAZELLE, of Providence, R. I., who lately started a loom-harness factory at Charlotte, N. C., has already commenced to enlarge. A new building is being equipped, and additional machinery being put in.

It is proposed to organize a cotton-mill company on the co-operative plan at Pensacola, Fla., to have a capital stock of \$100,000. A committee has been appointed to solicit stock, consisting of Messrs. S. C. Cobb, W. D. Chipley, F. C. Brent, L. H. Green and others.

MESSRS. DE PRIEST BROS., of Lattimore, N. C., intend to form a \$100,000 cotton-mill company, and will meet on the 22d inst. for permanent organization. An equipment of 6000 spindles and looms to suit will be put in. Work on buildings will soon commence.

MR. GEORGE SMITH, manager of the Bureau of Information of Macon, Ga., has received a proposition from a New England company to establish a \$230,000 cotton mill in Macon. It is said that the proposition is a very liberal one, and endeavors will be made at once to arrange for meeting same.

THE stockholders of the Laurens (S. C.) Cotton Mill, lately commissioned, have organized and elected the following directors: Albert Dial, J. O. C. Fleming, J. W. Todd, J. W. Ferguson, J. P. Simpson, V. M. Montgomery and W. E. Lucas. Mr. Lucas was also chosen president and treasurer. Of the \$200,000 capital proposed, \$150,000 has been taken, and work on the plant will soon be commenced.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

Feeding Cottonseed Hulls to Cattle.

At the recent meeting of the Texas Live Stock Association, which controls most of the "range" cattle of that State, the value of cottonseed for fattening was shown in a paper read by N. Sansom, of Alvarado, Texas. Mr. Sansom quoted from government analyses to show that cottonseed contained over 20 per cent. more food properties than grasses, wheat, middlings or any other stock feed. Other facts given were these:

"We must admit that seed, when properly fed on grass, will make as good beef as any other feed we have used in Texas. That the feeders of Texas in the past have made more money out of seed than any other feed I do not question. Yet the future use of raw cottonseed in Texas I do not think of importance enough to discuss at length. For many reasons it is going out of use. Chief among these reasons is the fact that seed can only be fed successfully on good pasture, and good pasture land in the cotton-raising districts of Texas is now too high-priced to admit of its use as pasture alone. Another and perhaps the main reason for abandoning the use of raw seed was the sharp competition between millmen for the last two years, putting seed practically out of the reach of feeders. Yet, should the present low prices of seed continue, it will doubtless cause many feeders to return to the use of raw cottonseed; especially will this be so where pasture lands are cheap and in reach of the seed.

"There are many feeders who will never abandon seed for any other feed so long as they can get them laid down in pasture at \$6 to \$7 per ton; and, judging from past experience, such feeders' chances for staying in business are quite as good, or perhaps better than those of his neighbor who uses any other kind of feed.

"As to the meal and hulls, in order that you may realize to what immense proportions the industry has grown in so short a time, I give a short history of the enterprise. In 1834 the first mill was built at Natchez and was a failure. In 1847 Frederick Good, of New Orleans, made another venture at a heavy loss. In 1857 Mr. Paul Aldridge, of New Orleans, went to Marseilles and watched the manufacturing of the Egyptian seed and the machinery used, came back to New Orleans and established a mill, but found it difficult to induce the farmers to load up their seed and take them to his mill and the various shipping points, they thinking only of the cotton and considering the seed of too small a business to bother with. So with eighteen months' hard labor, with men traveling over the country horseback, he secured only 1764 tons. Later the mills found the hulls accumulating, and it was with considerable expense that they were carried off and dumped into the low places, that being the easiest way to dispose of them. During the late war feedstuff became scarce in Mississippi, and the farmers were compelled to allow their cattle to graze off the hulls that had been thus disposed of, and to their surprise the cattle thrived.

"The crush of the United States is about 1,500,000 tons, Texas crushing about 700,000 tons, this making an average of 500,000 tons of meal and cake annually in the United States. Previous to the eighties our meal and cake were sent principally to Europe. About 1881-82 New England began to take our meal as a feedstuff for cattle, and by 1887 it was being largely used there, and its value was becoming generally known throughout New England. About 1880-85 the dairy people of Memphis

and a few cattle-feeders were using meal and hulls extensively.

"The feeding of meal and hulls began in earnest in Texas about 1890, and now we make in Texas alone enough hulls to feed 185,000 to 200,000 head of cattle and meal enough to feed 600,000 cattle. Thus it will be seen that by supplementing the hulls with sorghum, straw and ensilage, to say nothing of feeding the meal on grass, which is now done successfully, it is possible for Texas alone to feed 600,000 cattle on the products of cottonseed. All this comes under the head of the possibilities of the future feeding of cattle in Texas."

The Market for Cottonseed Products.

NEW YORK, February 19.

The conditions which governed the cotton-oil market for the past two weeks, and which were duly chronicled in last issue, with one or two trifling exceptions, remain unchanged. Increased exports, with a fair volume of home trade, together with comparatively light receipts at this market, have conjointly strengthened values. In the case of prime summer yellow a distinct increase of one half cent per gallon is firmly quoted. With regard to crude in bulk the mills are holding for higher prices, 19 cents being asked in several instances, while it is known that more than 100,000 gallons, aggregated orders, on an 18 cent basis, have been declined. The manufacture of compound lard has assumed proportions more in consonance with the views of crushers, and an unusually large supply of crude has found its way direct to the Western manipulators, the lowest figure being 18½ cents. The Rotterdam market remains unusually apathetic with regard to spot oil, its needs being in the main supplied from Baltimore, Savannah and New Orleans loading. Notwithstanding the fall in the value of English made oil, consumers of that nationality stand ready to purchase supplies of off summer yellow at 25½ cents, but 26 cents is the lowest acceptable figure. If the rumor be correct that a considerable proportion of the seed yet to be crushed has deteriorated in quality, an extra supply of off crude may be expected. Barrelled crude in fair proportions is being disposed of to local refiners at 22 cents, but the low price obtainable for white oil in the foreign markets has held operations in check. A number of the mills have already closed down, the cause being in the main lack of sufficient tankage and cake storage accommodation. The desire to hold stocks, in the expectation of improved values, has, however, something to do with the situation, when a resumption of operations to wind up the season's stock of seed will be commenced. The following are the current quotations: Crude, prime, 22 to 23 cents; f. o. b. mills, 18½ to 19 cents; crude, off quality, 20 to 21 cents; yellow summer, prime, 26½ to 27 cents; butter oil, 28 to 28½ cents; yellow summer, off quality, 25½ to 26 cents; white summer, 29 to 30 cents; yellow winter, 33 to 34 cents; white winter, 35 to 37 cents. The shipments of butter oil to Rotterdam have been unusually light, and the supply of this particular variety of oil exceeds the demand, but ordinary prime crude and summer yellow at this point are to be procured in limited quantities only.

Cake and Meal.—Orders from the European markets are coming in, owing to the protracted stay of inclement weather; for meal, \$12 per ton f. o. b. mills offered and accepted. The shipments from New Orleans for the week under review aggregate 3400 tons, chiefly for the Rotterdam market, the receipts at this market reaching 4000 bags. Private advices from Texas announce the sale of several carloads of cake at \$9 per ton f. o. b. for Kansas. Several of the mills have been unloading in a quiet way at these figures to feeders and exporters, while in some instances it has been delivered from mill premises as fast as manufac-

tured, but the great majority have held on a declining market rather than sell at current obtainable prices. Abnormally heavy stocks are therefore the rule rather than the exception. To many of the crushers the season has been a very unremunerative one, and where the possibility of practicing economies in the manufacturing processes presents itself, they are carried out with a degree of earnestness foreign to the craft in the bygone days of the business. Apropos of the question of reducing expenses, there are not a few matters of material moment to which Southern crushers might profitably turn their attention. For spot or to arrive cotton meal is quoted at \$15 to \$17 per ton; New Orleans quotations, \$14 to \$15.

Gold-Mining a Legitimate Business, Not a Wild Speculation.

ATLANTA, GA., February 13.

Editor Manufacturers' Record:

In a leading Southern daily paper of recent date I find the following advertisement:

If the reader has a few hundred or a few thousand dollars he can double his money in the next year by taking an interest in the — company. It owns the richest gold mine, possibly, in Georgia. The last rock sent to Professor — assayed \$563.37 per ton. We have thousands of tons of this rock, but need a stamp mill to get the gold out. This is no fake business; some of the best men in — are going into it. Samples of the quartz and full particulars can be had * * *

Gold-mining in the Southern as well as the Pacific States is a legitimate, safe and profitable business, and should be so treated by every investor possessed of average business sense. In selecting a mine for investment that class of men will naturally select mines of such a character as will insure a fair average of daily, monthly or yearly net profit, accepting occasional finds of rich "pockets" gladly, but not expecting them. Such glittering baits as that held out in the above advertisement are but lures to catch ignorant and unwary "suckers," and should be avoided and opposed by all men interested in the honest development of the South's wonderful resources.

A study of the statements contained in this advertisement, and of the only proper deductions to be drawn therefrom, and a comparison with known results of permanent mining operations in various parts of the South, with some data as to cost of mining and mine and mill equipment, may be of interest and serve to prevent the impression that gold-mining is only a wild, swindling "fake" speculation.

The Haile (S. C.) gold mine has none but low-grade ores, say \$4.50 per ton. The company runs a 60-stamp mill, concentrators and a chlorinating plant of eight tons daily capacity. So far over 10,000 tons of concentrates, representing at least 150,000 tons of crude ore, have been treated there, and the mine is steadily paying satisfactory profits.

In the Dahlonega region, in Lumpkin county, Georgia, the largest and probably the most ably managed mine is the Hand & Barlow. They are running successfully on \$4 ores, 170 stamps, and the credit side of their ledgers make a good showing.

In Cherokee county the old Franklin mine is now over 510 feet deep. Its ores average \$10 per ton. Their plant consists of ore crusher, twenty stamps, concentrators and a five-ton chlorinating plant, with which they treat fifty tons per day, saving 90 per cent. of assay value at a cost of \$2.60 per ton and netting over \$300 per day profit. Ores from this mine have assayed as high as \$70 or \$80 per ton, possibly even more, but it is the average of \$10 per ton they depend upon for their \$100,000 a year net income.

Hall county, Ga., has several strong veins more or less developed that occasionally assay high in figures, but it is the low but safe average they depend on to make them profitable.

Gwinett county, Ga., has a great number

of strong fissure veins, the ores from which will average from \$12 to \$20 per ton. As says from some of these have run as high as \$600 per ton, but none of the owners are wild enough to claim "thousands of tons" of such ores, but are well satisfied with a yield of 90 to 95 per cent. of average assay values.

Now, reverting to this magnificent "advertisement." It says: "We have thousands of tons of this rock." What do the advertisers mean by this? Naturally, one must infer that the vein or lode has been opened, and that that amount of ore, of an ascertained average value of \$563.37 (?) per ton, is actually mined and in the bins, or at least, "in sight," otherwise the statement so broadly made is a fraud. A mere supposition or belief in the existence of "thousands of tons" of ore of such richness is no warrant for so positive a statement. Therefore, we will place the most favorable, because the only proper, construction upon the wording of the advertisement and concede the existence of this rich body of ore. We must also assume the parties have an actual title to the property. The advertisement says nothing of needing capital to pay for it, merely to buy a stamp mill. If that is correct and their statements are true, they stand self-confessed dolts, blockheads, blunderers of first water. What! have to peddle out interests in so enormously valuable a mine merely to cover the paltry cost of a stamp mill!

Let us figure a little. Ores worth \$563.37 per ton are probably more or less sulphurets. Planning for a much more complete outfit than they say they need, a plant, providing for the best and most complete, would cost as follows:

Twenty stamp mill, with ore crusher, automatic ore feeders, plates, pans, amalgam sates, retorts, bullion furnace, etc.	\$5,500
Corliss engine and boiler	2,500
Concentrators	2,800
Chlorinating plant, furnace, etc.	3,250
Buildings and setting up plant	4,000
Freights	750
Working capital and contingencies	3,200
Total	\$30,000

Such a plant will handle with ease forty tons per day (the Franklin treats fifty with same plant). Taking the ores at \$563.37 per ton, and a saving of only 90 per cent. (such a plant should save 95 or 96 per cent. of such rich ores), forty tons per day will give a gross yield of \$20,281.32; allow \$3 per ton, cost of mining and milling, (\$2.60 at Franklin), \$120, or a net profit on first day's run of \$20,161.32, or \$161.32 more than the entire cost of the plant. Now a claim of "thousands of tons" cannot possibly mean less than 2000 tons, which, at the above low percentage of yield, would within fifty days give a net yield of \$1,008,600.

Does any sound business man doubt that if the above advertisers can satisfactorily demonstrate to investors that they have a clear legal title to a mine with "thousands of tons of this rock" in sight, there would be a moment's hesitation on the part of any one of a dozen responsible manufacturers of mining and milling machinery to furnish, erect and deliver, ready to run, a fully-equipped plant as described, accepting payment of earnings, when the first day's run will foot the whole bill? If they cannot give such guarantees, then their advertisement is a false pretense.

The honest owners of Southern gold mines should protest against such unwarranted misstatements and misleading fake advertisements. The South has a great number of gold mines, intrinsically valuable, certain to pay large profits on reasonable investments. The truth about them is all that need be placed before the public; it is all the public wishes. Let us hope nothing beyond this will ever be attempted.

In 1885 Messrs. Ybor & Manrara built the first cigar factory in the vicinity of Tampa, Fla. At present there are factories employing 5000 operatives in this section and doing a business estimated at \$6,500,000 yearly.

The volume of business in lumber and timber during the past week has shown more expansion than usual, notwithstanding the inclemency of the weather. The general conditions of the lumber and timber industry are, however, not materially changed, and lumber continues in fair demand, but at extremely low prices. The inquiry comes mostly from Central and South America and the West Indies. During the past week the following vessels were among the clearances from this port: Steamer Kong for Santo Domingo with 147,000 feet of lumber; ship Garibaldi for Barrow-on-Furness with 19 893 feet of lumber, 4836 cubic feet of hewn and 73,465 cubic feet of sawn timber; schooner McLean for Demerara with 244 594 feet of lumber; schooner Herald for Mayaguez, P. R., with 360,000 feet of lumber; steamship Monmouth for Buenos Ayres, Argentine Republic, with 1,206,572 feet of lumber, and other clearances, amounting in all to 2,462,918 feet. The total exports of lumber since September 1 aggregate 30,142,743 superficial feet.

of lumber, against 29,024,332 feet for the corresponding period in 1893-94. Although there are many complaints as to the dullness of the timber trade, there are many who expect an early improvement in the industry. There are a number of vessels loading timber, but work has been temporarily suspended on account of the severe storm. The shipments of hewn timber during the past week amount to 11,037 cubic feet, and of sawn timber to 113,000. The shingle business in this section has dwindled down to almost nothing, and the business of the past month was the worst in the history of the trade. Lumber freights are steady at \$5.50 to \$6 to the West Indies; coastwise, \$5.50 to \$6 per M; River Platte, \$11, and Mexico, \$6.50 to \$7.

Beaumont.

[From our own Correspondent.]

BEAUMONT, TEXAS, February 18.

As to the volume of transactions in lumber during the past week, they have been lighter than at any time during the last ten years. On Wednesday last a snow-storm set in, the like of which is not in the recollection of the oldest citizen. Of course, all business was suspended, especially among lumbermen, and the following day was given over to pleasure. The snow continued to fall until Thursday night, when the depth reached twenty-eight inches on a level. Aside from the loss to the lumbermen, that of the cattlemen is much greater. As to the damage to oranges, authorities differ, some claiming that the trees will bud out and yield a good crop. The cold snap, it is said, will benefit small fruits. Under existing conditions our primary industry has been temporarily suspended and all the mills shut down. Very few orders have been received from dealers, and those that have come to hand could not be shipped at the moment. There has really been nothing moving except for export. The Reliance Lumber Co., of this city, has secured the contract for the timbers for the Choctaw Coal & Railway Co. The road to be constructed will be something more than 100 miles in length, and the timbers will amount to over 3,000,000 feet. The Reliance Company has chartered the schooner Alert for a cargo of lumber to Jamaica. The Alert left Mobile yesterday for Sabine Pass, where she will load 450,000 feet.

St. Louis.

[From our own Correspondent.]

ST. LOUIS, February 18.

A week ago there was considerable business doing in the general lumber market, but the severe cold weather has to some extent restricted the movement; in fact, this last cold snap has well-nigh closed up certain branches of the industry, and receipts have fallen off materially, so that there is very little lumber coming to hand. There has been some business doing in the hardwood line, but this branch has felt the pressure of the severe weather. Factories are not buying freely at the moment, but yardmen are taking in stock rather more than usual. The demand at present is mostly from wagon manufacturers and buyers of wagon stock. Prices for all descriptions of hardwood are low, although quartered oak continues to show considerable firmness, with signs of an advance. Dry oak, whether quartered or plain, is in light supply. Holders, as a rule, are not forcing sales and are of the opinion that spring will show a higher range of values. Poplar is in good demand at steady prices. Cypress is selling freely and values remain firm. Walnut is dull and prices low, except for the best stock. There is nothing of interest among yellow-pine men, and in milling sections operations in many cases are suspended for the time being on account of frosty weather. In some places in the South roads are in such bad condition that it is impossible to move logs, and orders are now coming freely, so that when mills

are prepared to operate they will have a good run. At a meeting of the Lumbermen's Exchange, held last week, that body resolved to go into a general revision of the rules governing the inspection of lumber in this market. The meeting was called for the purpose of passing upon amendments proposed to be made to the inspection rules, but the amendments were not acted upon, and the meeting adjourned after passing a resolution providing for a general revision. The stockholders of the Arkansas & Missouri Lumber Co. met in East St. Louis last week and elected officers and boards of control. The following officers were elected: President, A. J. Neimeyer, St. Louis, Mo.; vice-president, C. W. Goodlander, Fort Scott, Kans.; secretary, A. Strauss, St. Louis, Mo.; general auditor, R. A. Long, Kansas City, Mo.; treasurer, L. Werner, St. Louis, Mo. The above-named officers are also members of the board of directors, together with the following: C. W. Fouke, Texarkana, Texas; I. A. Freeman, Millville, Ark.; J. F. Rutherford, Pine Bluff, Ark.; C. E. Neely, El Dorado, Ark.; I. B. White, Grandin, Mo.; W. R. Abbott, Fort Smith, Ark. The organization is now practically completed, but there are yet some legal formalities that must be complied with before the new company will be open for business. The main office will be in this city, and branches will be maintained in other States.

Southern Lumber Notes.

L. B. SETTLE, of Berry, N. C., wants to correspond with buyers of shuttle-blocks.

MR. G. D. DE JARNATTE, of Mayfield, N. C., is looking for a market for shuttle-blocks.

MR. FRANK F. HOWE, of Sistersville, W. Va., wants to correspond with wood-turning mills.

THE steamship Yemassee, of the Clyde Line, cleared from Jacksonville, Fla., on the 16th inst. having among her cargo 50,000 feet of lumber and 1000 railroad ties.

THE Curphey & Wollen Lumber Co., of Vicksburg, Miss., began running its mills on full time on the 11th inst. It has recently secured a large order for cottonwood from the West.

THE receipts of lumber at the port of Norfolk, Va., for the month of January aggregated 21,636,275 feet, logs 7,593,736 feet, staves 266,095, shingles 2,112,000 and railroad ties 10,650.

THE recent rains have caused very high water in all the rivers in Florida emptying into Escambia and Choctawhatchie bays, and the receipts of timber by rafts at Pensacola are at present very heavy.

THE Park Lumber Co. was incorporated in St. Louis on the 13th inst., the stockholders being John N. Verdin, R. B. Swift and T. Raisieur. The company will handle piling, railroad stock and posts.

THE coastwise shipments of lumber from the port of Fernandina, Fla., during the month of January were 1,064,816 feet, 125,000 shingles and 652 cases of cedar. The foreign exports were 843,853 feet of lumber.

THE schooner Phoenix sailed from Jacksonville, Fla., last week for Nassau, New Providence, with a cargo of 172,000 feet of yellow-pine lumber, and the schooner Mary C. Decker was loading lumber for the same port.

A DISPATCH from Birmingham, Ala., states that the new saw mill of the Milner, Caldwell & Flowers Co., at Bolling, Ala., was destroyed by fire last week. The plant cannot be replaced for \$20,000. An insurance of \$10,000 was carried.

THE receipts of lumber at the port of New Orleans for the week ending February 15 were 975,000 feet, and since September 1 they amount to 36,750,299 feet, against 37,336,016 for the corresponding period in 1893-94. Receipts of shingles for the week

were 16,000, and since September 1 they amount to 4,110,000.

THE Beaumont Journal states that Messrs. W. A. Savage and C. C. Smith, of Charleston, W. Va., visited Beaumont last week. The object of their visit was to pick out a location for a factory for the manufacture of wagons and implements into which hardwood can be converted.

THE Kearney Lumber Co., of Little Rock, Ark., is making arrangements for the establishment of a big experimental fruit farm on the company's property, near Kearney. The farm will contain 100 acres, and will be devoted to the cultivation of peaches and strawberries.

A SPECIAL from Summerville, Ga., states that Mr. Keith Webb, manager of the Oxley Stave Co., has closed a deal with Dr. R. D. Jones for a site on which to erect a mill. Mr. Webb expects to have the mill in position about the 1st of March. The Oxley Stave Co. has ample capital and owns a number of stave mills located in different parts of the country.

THE shipments of lumber and timber from the port of Mobile for January last, as reported by the collector of customs, are as follows: Sawed and hewn timber 6,300,000 superficial feet and boards and deals 5,800,000 feet, making a total of 12,100,000 feet. The lumber exports since September are about equal to those of the same date last year. The timber exports show a gain of 6,000,000 superficial feet.

THE milling plant of the W. C. Heyser Lumber Co. of Michigan, located at Chattanooga, Tenn., which has been closed down for about two years, will soon go into operation again. Mr. Walter I. Heyser, of Jackson, Mich., arrived in Chattanooga last week, and expects to have the mill in operation in about ten days. The company has about 5,000,000 feet of logs up the river, a part of which will be at its mill in a few days.

THE Texas Tram & Lumber Co., of Beaumont, Texas, has received a handsome new tram engine. This engine is to go into service on the company's tram in Jasper county, and will haul logs to Kirby, where they will be transferred to the Gulf, Beaumont & Kansas City Railway and brought to the mills at Beaumont. The Texas tram log camp will be moved to Kirby, it is stated, and six miles of new tramroad is to be built to give the proper connection.

A MEETING of the St. Louis Lumbermen's Exchange was held in that city last week for the purpose of making a general revision of the rules governing the inspection of lumber in that market. The main business before the meeting was passing upon amendments proposed to be made to the inspection rules. Nearly all the members of the exchange were present. Prest. R. M. Fry announced the special order of business, which was to adopt or reject propositions submitted as amendments to the inspection rules. After much discussion Mr. Howard Watson, president of the Wholesale Lumber Dealers' Association, moved that a committee of five be appointed with instructions to make a general compilation and revision of the rules, together with a comparison of the rules in force at other markets, and to report at a meeting of the exchange to be held on March 16. After some debate the motion was carried, and the meeting adjourned.

THE third annual report of the bureau of industrial statistics of Maryland contains a mass of statistics and considerable valuable information on the various State enterprises, with liberal quotations from the last census on the manufacturing of various kinds. Mr. A. B. Howard, the compiler, has also given much attention to the condition of the unemployed and to the "sweating" system, the result of which is embodied in the report.

BALTIMORE MONEY IN FLORIDA.

A \$500,000 Company Investing in Farm Lands.

Several months ago the MANUFACTURERS' RECORD referred to a project of Mr. Christian Ax and others to drain a tract of 15,000 acres in Florida, and dispose of it for farming purposes. The draining has been accomplished by dredging a canal nine miles long, emptying into the Ocklawaha river, with branches aggregating fifteen miles.

The lands to be thus opened for cultivation are in a very rich fruit and vegetable-growing section tributary to the towns of Citra, Sparr and Fort McCoy, and the head of the canal is within a half-mile of the Florida Central & Peninsular Railroad, midway between Sparr and Citra. A fall of sixteen feet is provided for in the survey of the canal, and a water-power equal to 600 horse-power will be developed and utilized for manufacturing purposes. Locks will be required and the canal will be navigable for small boats, affording a cheap mode of transportation for the timber and fruit interests through to the Ocklawaha river, and thence to the St. John's.

Colonization is to be a feature in the work of the promoters, and already negotiations are in progress for a large settlement of Germans through the efforts of Mr. Ax. The latter is a millionaire member of the firm of G. W. Gail & Ax, tobacco manufacturers, of Baltimore. He was induced to take up this project about two years ago. As a result of the improvement this tract, which could have been purchased for from \$3 to \$10 per acre before, can now be sold at \$33 per acre, but the owners have refused to sell at that figure. The company interested has been incorporated as the Meadow Land Improvement Co. Mr. Ax is president; H. C. Turnbull, Jr., of Baltimore, vice-president, and John W. Paine and Jacob Albert, also of Baltimore, directors. The capital is \$500,000.

Colonies in Georgia.

Messrs. F. Missler & Krimmert, bankers and steamship agents at 106 West street, New York, write the MANUFACTURERS' RECORD that they are arranging to bring several thousand immigrants to Georgia. They have established a settlement called Missler, and have already sent several families of Germans to it. The MANUFACTURERS' RECORD is also informed that this firm has purchased 10,000 acres at Normandale, Ga., on the line of the Southern Railway, for colonization purposes. They are advertising the advantages of this section in the Northwest and in Germany.

"Spoke with Prophetic Certainty."

THE Baltimore MANUFACTURERS' RECORD, edited by Richard H. Edmonds, is doing more than any single factor in placing the advantages of the Southern States before the world and causing the big inflow of capital and people. Mr. Edmonds really stands godfather to the great industrial boom that now attracts attention to the South. Years ago the MANUFACTURERS' RECORD took the position that the South should and would be the leading textile-manufacturing centre of the globe, but this was denounced as visionary. Late events show that the publication spoke with prophetic certainty, for it is now conceded that the statement is correct. The Southern States magazine, the twin publication of the MANUFACTURERS' RECORD, and edited by William H. Edmonds, takes equal rank in promoting Southern progress. Verily, the Messrs. Edmonds are worth more to us than a baker's dozen of such statemen as we have sent to Washington in the last two decades, and they deserve monuments.—Port Lavaca (Texas) Port Lavaca.

PHOSPHATES.

Review of Phosphate Trade.

The movement of phosphates in 1894 as outlined by the Anglo-Continental (late Ohlendorff's) Guano Works at the London agency contains some interesting statistics, and covers fully the production, shipments, sources of supply, etc., for the past year. The circular says: "During the year 1894 we have to record increased importations of phosphate into almost all countries, and a reduction in price of about 1d. per unit, so that the advance gained at end of 1893 has in most cases disappeared, and we have arrived again at very low prices which cannot be remunerative to miners. Consequently, efforts have been made again in several directions to form combinations with a view to restrict production and to regulate selling prices. The amount of phosphate received into the United Kingdom during 1894 was 380,269 tons, against 323,527 tons in 1893 and 314,180 tons in 1892. Larger quantities have come from Florida, Belgium, France and Algeria, while South Carolina sent 25,000 tons less, on account of the prolonged interruption of production caused by the cyclone of August, 1893. The increased quantities from Florida are due to larger shipments from the Peace river mines. The arrivals from Algeria increased in 1894 to 25,313 tons. The importations of phosphate into Germany and Holland amounted to nearly 300,000 tons, of which about 250,000 tons came from Florida. Less than 200,000 tons consisted of high-class Florida phosphate, the remainder being pebble and Peace river phosphate. The consumption of phosphate, which during the last few years was steadily increasing, has now received a serious check through the bad state of agriculture in nearly all countries. Most of the agricultural produce, especially such staple articles as wheat, sugar, cotton, etc., are so very low in value that it is only natural to expect a serious decline in the consumption of fertilizers, and it is almost certain that during the present year less phosphate will be required than during the last few years." With regard to the production of phosphate the circular gives the following figures for South Carolina and Florida: "Production in South Carolina from September 1, 1893, to August 31, 1894, as follows: Consumed (Charleston-Beaufort), 152,000 tons; sent to interior, 61,992 tons; shipped coastwise, 167,332 tons, and foreign shipments, 94,875 tons, making a total of 476,199 tons, against 618,569 tons shipped and consumed in 1892-93 from same sources, and 548,396 tons in 1891-92. From the 1st of January to 31st of December, 1894, the shipments from all ports of Florida, Brunswick and Savannah, Ga., railroad and State consumption amounted to 589,497 tons, of which 441,818 tons were foreign and 147,679 tons were domestic, against 331,418 tons foreign and 100,353 tons domestic, making a total of 431,771 tons, in 1893." The progress of Florida shipments is given as follows: "For the year 1890, 26,108 tons; 1891, 128,591 tons; 1892, 274,215 tons; 1893, 319,674 tons, and 1894, 417,958 tons, making a total of 1,166,546 tons."

Phosphate Markets.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, February 21.

In the local phosphate market the business of the week has not improved, and the buying by fertilizer manufacturers is restricted to small lots for immediate use. The latest reports from points of production are unchanged, and the markets in Florida and South Carolina are dull, without any special feature. In South Carolina the shipments are mostly foreign, a very small trade being done in domestic lines. The movement in Florida continues fair, and the demand mostly from European

sources. The list of values are steady, as follows: South Carolina crude rock, \$3.50 to \$3.75; hot-air-dried, \$4 to \$4.25, and ground rock, \$6.50 to \$7, f. o. b. Charleston. Florida rock is quoted \$3.25 to \$3.50 for river pebble and \$4.65 to \$4.75 for land rock, all f. o. b. Tampa or Punta Gorda. There are no local charters reported during the past week. The only charter reported in the New York market is a schooner, 746 tons, Philadelphia to Charleston with coal, 85 cents, and back to Cartaret, N. J., with phosphate rock at \$1.85.

FERTILIZER INGREDIENTS.

The market for all classes of material continues dull, with little or no demand at the moment. The supply of orders is very limited for ammoniates and prices continue easy, but not quotably lower. Sulphate of ammonia and dried blood are reported very quiet at the former figures. The disposition of manufacturers is to purchase very light, owing to the unsettled state of the markets in the South. Business in nitrate of soda is light, and the market steady at \$1.80 to \$1.85 in New York for spot, and \$1.77½ for forward shipment.

The following table represents the prices current at this date:

Sulphate of ammonia, gas.....	3 25@	\$3 30
Sulphate of ammonia, bone.....	3 20@	—
Nitrate of soda.....	1 90@	2 00
Hoof meal.....	1 80@	—
Blood.....	1 95@	2 00
Azotine (beef).....	2 00@	—
Azotine (pork).....	2 00@	—
Tankage (concentrated).....	1 75@	—
Tankage (9 and 20).....	1 75 and 10	—
Tankage (7 and 30).....	17 00@	18 00
Fish (dry).....	22 00@	23 00
Fish (acid).....	15 00@	15 50

CHARLESTON, S. C., February 19.

Trade here for the past week in the phosphate market has been dull, with little change from the previous week. Inquiries are somewhat more lively, but manufacturers are not buying to any extent. The local factories are shipping fertilizers in small lots, but this trade is still in a congested state; while this lasts a dull and inactive market may be expected. The shipments of rock are fair, and the shipments for the month will be largely in excess of last month. Prices current are \$3.50 crude, \$4 hot-air-dried and \$7 ground rock, all f. o. b. Charleston. The week's shipments by water were: E. G. Hight, 700 tons for coastwise; I. T. Campbell, 800 tons for Weymouth; A. Holbrook, 900 tons for Cartaret; W. W. Converse, 1000 tons for New London; J. H. Tingue, 700 tons for New York. In port and loading is the E. C. Middleton. The coastwise shipments since September 1 were 38,215 tons crude, 1315 tons ground rock, against 51,131 tons crude, 300 tons ground rock for same date last year.

Phosphate and Fertilizer Notes.

THE Faght Chemical Co., of Dallas, Texas, was incorporated at Austin on the 8th inst. The incorporators are J. M. Faght, W. S. Faght, J. W. Faght and W. D. Trent.

IT is stated that the phosphate shipments from Fernandina for February will show a decided increase over the corresponding period last year, and the same can be said for the coming month.

THE recent decision by Judge Locke, at Tampa, Fla., in the case of Ramsdall vs. the Florida Commercial Co., gives to the latter title to several established mines worth in the neighborhood of \$100,000.

AGNEW'S STANDARD SOFT PHOSPHATE & MINING CO., located near Kendrick, in Marion county, Fla., has made application to establish a postoffice at Harlowe. The works are very busy at present shipping phosphate.

MR. H. F. MAYFIELD was at Bartow last week and, it is said, spent several days looking over some phosphate lands in Polk county, on which he will probably erect a mining plant for the New York & Florida Phosphate Co.

A SPECIAL from Rowesville, S. C., states

that Mr. W. C. Cram has purchased the valuable plantation of Capt. A. P. Miller, of Barnwell county, on the Atlantic Coast Line and South Bound Railroad. The lands are said to contain deep beds of high-grade phosphate rock.

MR. C. THALHEIM, in writing from Ocala, Fla., to the MANUFACTURERS' RECORD, says: "Your correspondent was wrong in saying that Mr. Laurant, who is my partner in the mines mentioned, was an engineer who had been in the employ of the French Phosphate Co. He is a French gentleman with an immense capital who has acquired some mining interests here. Our firm as regards mining is Franco-American Phosphate Co."

THE shipments of phosphate rock from the port of Charleston, S. C., during the past week were as follows: Schooners John H. Tingue, 850 tons, and Clara A. Phinney, 500 tons, both for New York. The coastwise exports since September 1 were 38,215 tons of crude rock and 1315 tons of ground. For the corresponding period in 1893-94 the exports amounted to 51,131 tons of crude and 300 tons of ground.

THE British steamship Tyneadad arrived at Port Tampa on the 15th inst. to load about 3000 tons of phosphate from the Land & Pebble Co.'s mine. The steamship Well-friend finished loading on the same date about 2064 tons of pebble from the Florida Engineering Co., and the steamship Aluana finished loading about 2075 tons of rock from the Netherlands Phosphate Co. The former sails for Dublin and the latter for Rotterdam.

NEW ORLEANS parties were in Mississippi City on the 13th inst. in the interest of a scheme of some magnitude, backed by New Orleans capital. It is said the plan is to erect large fish traps of wire along the coast for the purpose of trapping the immense shoals of sardines which annually visit these shores. These fish yield a large quantity of oil, and the refuse makes a fine fertilizer. It is also reported that the New Orleans Garbage Co. has an interest in the venture. The Vermont Chemical & Fertilizing Co., of New Orleans, is said to be the leading promoters of the enterprise.

Literary Notes.

MR. GLADSTONE has just written an article on "The Lord's Day," wherein he considers, with the fervor of conviction and the breadth of learning for which he is famous, the grounds for keeping as the Christian Sabbath the first instead of the seventh day of the week, and the proper measure and spirit of Christian Sabbath observance. The article will appear in McClure's Magazine for March, along with a series of portraits of Gladstone covering a period of eighty years and showing him at every important epoch of his life.

IN unpretentious binding comes a little book entitled "Forty Witnesses to Success." The volume makes wholesome and inspiring reading. Its contents cover four lectures, viz: Yokes in Youth, How to Succeed, How to Fail, and Religion and Business. These lectures were given by Rev. Charles Townsend, pastor of Woodland Avenue Presbyterian Church, Cleveland, Ohio. In preparing these lectures, which were delivered to congregations composed of young men, Mr. Townsend proceeded in a most business-like way to get his data. He laid books aside for the moment and consulted men. The lectures were based on responses received from forty statesmen, lawyers, merchants, bankers, manufacturers, judges, scientists and instructors. The plain-spoken manner in which the problems that beset the young man of today are treated makes the book a helpful companion to the rising youth. The publishers are Anson D. F. Randolph & Co., 182 Fifth avenue, New York city.

Iron Markets.

CINCINNATI, February 16.

The week in pig iron has been dull and featureless. The extreme cold weather has interfered with active operations in foundries and mills, particularly in the former, where it has been impossible to keep the sand from freezing. The result is a reduced melt. Shipments, also, of both pig iron and coke have been very light, in consequence of the difficulty of loading and the partially disabled conditions of the railroads. Some manufacturing plants have, therefore, been inconvenienced by failure of raw material to arrive. The general temper has been without any spirit or nerve on the part of buyers, who generally prefer to see signs of greater activity in their own business before anticipating their wants.

The more hopeful features of the situation are the abatement for the time being of the gold-exporting scare; the prospect for a somewhat active season in structural work, making heavy demands already upon the large Bessemer steel plants; the indications that the smaller railroads will be larger consumers of new rails than for several years past, and the reasonable certainty that car-building will at least improve to some extent. The outlook for cast-iron pipe is also regarded as good after the opening of spring. The market closes rather weak at following prices:

Southern coke No. 1 foundry.....	\$ 9 75@	\$10 50
South. coke No. 2 fdr., and No. 1 soft.....	9 25@	9 50
Hanging Rock coke No. 1.....	12 00@	12 50
Hanging Rock charcoal No. 1.....	16 00@	17 50
Tennessee charcoal No. 1.....	14 00@	14 50
Jackson county stone coal No. 1.....	14 50@	15 00
Southern coke, gray forge.....	8 00@	8 50
Southern coke, mottled.....	8 25@	8 75
Standard Alabama car-wheel.....	15 75@	16 50
Tennessee car-wheel.....	15 50@	16 75
Lake Superior car-wheel.....	14 00@	14 50

PHILADELPHIA, February 16.

Stove makers, bridge builders, cast-iron pipe works and jobbing foundries in the vicinity, and as far west as Harrisburg, are with but few exceptions pretty busy filling orders. In Alleghany county, of which Pittsburg is the magnetic centre, the usual amount of grumbling is heard, but the volume of business is nevertheless large. Bessemer pig is firm, so is Bessemer steel. Pig-metal purchases are for small amounts and for fairly early delivery.

We quote for cash f. o. b. Philadelphia:

Standard Alabama No. 1 X.....	\$11 75@	\$12 00
Standard Alabama No. 2 X.....	10 75@	11 00
Strong lake ore coke iron No. 1 X.....	13 00@	13 25
Strong lake ore coke iron No. 2 X.....	12 25@	12 50
Lake Superior charcoal.....	15 50@	15 75
Standard Alabama C. C. C. W.....	17 75@	18 00

We quote for cash f. o. b. St. Louis:

Southern coke No. 1.....	\$10 25@	\$10 50
Southern coke No. 2.....	9 75@	10 00
Southern coke No. 3.....	9 25@	9 50
Southern gray forge.....	9 00@	9 25
Southern charcoal No. 1.....	14 00@	14 50
Missouri charcoal No. 1.....	12 50@	13 00
Ohio softeners.....	14 00@	14 50
Lake Superior car-wheel.....	15 50@	16 00
Southern car-wheel.....	16 00@	16 50
Genuine Connellsville coke.....	4 40	—
West Virginia coke.....	4 40	—

We quote for cash f. o. b. New York:

No. 1 standard Southern.....	\$11 75@	\$12 00
No. 2 standard Southern.....	10 75@	11 00
No. 1 standard soft.....	10 75@	11 00
No. 1 foundry lake ore coke iron.....	13 00@	13 25
No. 2 foundry lake ore coke iron.....	12 25@	12 50
Lake Superior C. C. C. W.....	15 50@	15 75
Southern C. C. C. W.....	17 75@	18 00

ROGERS, BROWN & CO.

ABERDEEN, MISS., is awakening to the importance of home industries. The town is admirably adapted by superior natural advantages for profitable manufacturing. It has an abundance of timber in adjacent territory and is close to the Alabama coal and iron regions. Fertile agricultural land for the cultivation of all kinds of fruits and vegetables surround the town. A progressive citizenship, flourishing banks and business houses, and church and school facilities add to the attractiveness of the place. The city council and the Aberdeen Business League are constantly on the alert to further the town's interests. A contract has just been closed for electric lights, and an ample supply of water is already provided. Liberal inducements are offered to manufacturing enterprises. Three railroad systems give excellent shipping facilities.

FORTIETH ANNUAL REPORT.

OFFICE OF NORTHERN CENTRAL RAILWAY COMPANY,

BALTIMORE, February 19th, 1895.

To the Stockholders of the Northern Central Railway Company:

The Directors respectfully submit the following report of the operations of the main line and of the railroads now operated under lease or otherwise by this Company for the year ending December 31, 1894:

EARNINGS.	
From freight.....	\$4,489,463 22
" passengers.....	1,127,056 32
" express.....	103,078 10
" mails.....	92,516 30
" miscellaneous.....	218,546 75
Total earnings.....	\$6,031,260 69

EXPENSES.	
For conducting transportation.....	\$1,685,966 35
" motive power.....	1,290,087 47
" maintenance of cars.....	545,469 94
" maintenance of way.....	622,676 61
" general expenses.....	86,976 11
Total expenses.....	4,234,116 48

Net earnings.....	\$1,797,144 21
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The gross earnings from operation of the Northern Central Railway and railroads controlled by it for the year ending December 31st, 1894 were.....	\$6,031,260 69
And for previous year.....	6,881,806 24

Showing a decrease in gross earnings of.....	\$850,545 55
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The expenses for the same period were.....	\$4,234,116 48
And for the previous year.....	4,763,156 20

Showing a decrease in expenses of.....	\$529,039 72
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The net earnings for the same period were.....	\$1,797,144 21
And for the previous year.....	2,118,650 04

Showing a decrease in net earnings of.....	\$321,505 83
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INCOME ACCOUNT.	
In addition to the net earnings as above stated.....	\$1,797,144 21
There was received from dividends and interest.....	221,921 35
Interest account, exchange, etc.....	55,136 75
Interest on equipment.....	24,503 28
Proportion of loss from operating Elmira and Canandaigua Divisions received from Pennsylvania Railroad Company.....	84,774 29
Total net receipts.....	\$2,183,479 88

From which deduct the following amounts:	
Rental Shamokin Valley and Pottsville Railroad.....	\$200,662 92
Rental Elmira and Williamsport Railroad.....	153,757 01
Rental Summit branch Railroad.....	62,499 96
Expenditures Shamokin Valley and Pottsville Railroad.....	32,471 55
	\$449,391 44

Interest on equipment:	
Shamokin Valley and Pottsville Railroad.....	\$4,515 50
Elmira and Williamsport Railroad.....	14,949 53
Elmira and Lake Ontario Railroad.....	17,852 48
	\$37,317 51

Deduct:	
Interest on funded debt.....	\$789,716 25
Rents and interest on real estate mortgages and ground rents.....	23,863 25
Interest on car trusts.....	61,204 69
State tax on capital stock and bonds.....	37,944 97
Amount advanced Mineral Railroad and Mining Company for losses in operation in 1894.....	124,000 00
Amount advanced Elmira and Lake Ontario Railroad Company for interest.....	25,031 75
	\$1,061,760 81

Balance to credit of Income Account for 1894.....	\$635,960 12
Out of which were paid cash dividends of seven per cent.....	\$26,267 00

Leaving amount to be transferred to credit of Profit and Loss Account for 1894.....	\$109,693 12
Amount to credit Profit and Loss Account, December 31st, 1893.....	\$1,628,276 66
Less amount charged in settlement of sundry accounts.....	3,216 83
	1,625,059 83

Balance to credit of Profit and Loss Account, December 31st, 1894.....	\$1,734,752 95
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The total number of passengers, irrespective of the division over which they were carried, the passenger mileage, and the revenue derived from the same, on all lines of the Company, were:

	Passengers.	Passenger's One Mile.	Earnings.	Rate per Passenger per Mile.
1894.....	4,129,905	51,692,311	\$1,127,656 32	2.181
1893.....	4,631,969	61,629,942	1,302,879 44	2.114
Increase.....				.067
Decrease.....	502,064	9,937,631	175,223 12	
Percentage.....	10.84	16.12	13.45	3.17

The total number of tons, irrespective of the division over which they were moved, the tonnage mileage, and the revenue derived from the same, on all lines of the Company, were:

	Tons.	Tons One Mile.	Earnings.	Rate per Ton per Mile.
1894.....	12,668,949	746,328,510	\$1,489,463 22	.602
1893.....	13,266,212	857,194,188	5,188,636 16	.605
Increase.....				
Decrease.....	1,287,263	110,865,678	699,172 94	.003
Percentage.....	9.681	12.934	13.475	

The aggregate movement of bituminous coal was 1,998,821 tons, a decrease of 438,073 tons, and of anthracite coal 3,995,793 tons, an increase of 34,095 tons. The tonnage of both classes amounted to 5,994,614 tons, as against 6,398,592 for the preceding year, being a decrease of 403,978 tons in actual aggregate of coal transported, irrespective of the number of divisions over which it was moved.

The amount of grain received at the elevators at Canton, as compared with the previous year, was—

1894.....	5,726,468 bushels.
1893.....	11,362,174 "

A decrease of..... 5,635,709 "

which strongly reflects the unfavorable conditions prevailing in the export traffic.

The amount of grain received at the local elevator, No. 2, in the city of Baltimore during the year was 1,780,212 bushels, as against 1,694,362 bushels in 1893, thus further proving its advantage to the local interests of the city.

The main items of tonnage, besides coal and grain, were lumber, iron ore, manufactures of iron and petroleum.

The tonnage mileage shows a decrease of 12.93 per cent, and the gross receipts from freight traffic a decrease of 13.475 per cent.

The average receipts from freight on your main line, leased lines and branches, were .602 cent per ton per mile—a decrease of .003; the cost per ton per mile was .427 cent, an increase of .005 cent; and the net profit per ton per mile was 1.75 mills, as against 1.83 mills for 1893.

The passenger business for the year shows a decrease in mileage of 16.12 per cent., while the revenue received therefrom decreased \$175,223.12, or 13.45 per cent. As appears from the preceding tables, there was a net profit per passenger per mile of but 1.53 mills, as compared with a profit in 1893 of 2.59 mills.

While all the commercial interests of the country continued to be very seriously depressed throughout the year, and the gross earnings were reduced to the extent of over \$850,000 as compared with 1893, the stockholders may be congratulated upon the fact that, through the rigid economies enforced in all branches of the service, the net earnings were sufficient to enable you to pay dividends of 7 per cent.

No new work was undertaken during the year, and the only charge to Capital Account was for the equipment provided through Series II of the Pennsylvania Car Trust, which matured June 1st, 1894, at which time 700 hopper gondola cars thus furnished became your property, and were added to your regular equipment.

During the past year the advances to the Mineral Railroad and Mining Company amounted to \$124,000, which were charged against Income Account.

The amount of bonds outstanding under your Consolidated General Mortgage was increased by issue of Series E, 4 1/2 per cent., amounting to..... \$157,000

And reduced by the operations of the Sinking Fund as follows:—

Series A and B drawn and payable July 1st, 1894..... 114,000

Net increase..... \$43,000

Second General Mortgage Bonds redeemed through the Sinking Fund..... 28,000

Making the total increase in funded debt in 1894..... \$15,000

There was an increase of 5.28 miles in Company sidings, consisting mainly of the extension of a branch, 1.38 miles in length, on the Lykens Valley Railroad to the Williamsport Colliery, to facilitate the delivery of timber for mine purposes, and the building of a branch, 3.88 miles long, on the Shamokin Division to reach the Scott Breaker.

There were 3896 tons of new steel and 183,968 ties used in renewals and repairs.

Extensive repairs were made to Elevator No. 3 and to the warehouses at Canton.

The motive power was improved by replacing 8 old freight and shifting engines by new standard freight locomotives, so that the entire power, with the exception of one engine, is now up to full standard.

Three old passenger cars were replaced by new equipment, and 76 box, 45 hopper, 20 long gondolas and 4 cabin cars rebuilt during the year. Two cabin cars were added to the equipment.

Under the arrangement referred to in the last report, the Terminal Warehouse Company completed a commodious warehouse for the storage of flour, canned goods and general merchandise reaching Baltimore over your lines, and opened it for business in September, 1894. Its operation has proved very satisfactory, both to your Company and to the commercial interests of that city.

In order to give the companies contributing traffic to the Union Railroad of Baltimore, an ownership therein based upon the amount of such contributions, 5000 shares of its stock were sold to the Philadelphia, Wilmington and Baltimore Railroad Company, the remaining 7000 shares being held by your Company.

Under the revised organization taking effect December 1, 1894, Mr. Charles A. Chipley was appointed Assistant General Freight Agent in charge of Local Traffic; Mr. John B. Thayer, Jr., Assistant General Freight Agent in charge of Through Traffic, and Mr. George D. Dixon, Division Freight Agent at Baltimore, vice Mr. Thayer, promoted.

Mr. Samuel Porcher was also appointed Assistant Purchasing Agent March 1, 1894.

The following statements of the Treasurer accompany this report: Income Account, General Financial Statement, Profit and Loss Account and Statement of Bonds and Stocks owned by the Company. There is also appended to the report the Statement of the Insurance Fund. Your attention is also called to the reports of the General Manager and Auditor, showing in detail the operations of the year.

It affords the Board great pleasure to acknowledge the zeal and fidelity shown by the officers and employees in the discharge of their duties during the past year.

By order of the Board of Directors,

G. B. ROBERTS

President.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

*Means machinery is wanted, particulars of which will be found under the head of "Machinery Wanted."

**In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Anniston-Hosiery Mill, etc.—Thos. A. Davis intends to put in machinery for manufacturing hosiery, towels and bed spreads.*

Birmingham-Typewriter Works.—The Ellis Typewriter Co., capitalized at \$20,000, has been incorporated by S. A. Ellis, W. A. Dawson and W. K. Brown to manufacture and sell typewriting and printing machines.

Bolton-Saw Mill.—Milner, Caldwell & Flowers will rebuild their burned saw mill; new plant is to cut 75,000 feet daily.

Cedar Bluff-Cotton Mill.—The erection of a cotton mill is talked of.

Decatur-Saw Mill.—Geo. Arantz & Bro. are putting in a new band mill.

Eufaula-Electric-light and Water Works.—A bill has passed the legislature to authorize the city of Eufaula to build or buy water and electric-light plants.

Luverne-Saw Mill.—G. N. Buchanan will erect a saw mill.*

Munford-Cotton Mill.—A company is proposed to build the cotton mill lately noted. George W. Chambers, of Talladega, is interested and can be addressed.

ARKANSAS.

Siloam Springs-Electric-light Plant.—The Siloam Springs Improvement Co. has been incorporated to establish electric-light plant, etc. E. T. Wisner is president; directors, R. S. Morris, Z. T. Conley, R. G. Alfrey, F. M. Axtell and E. B. Watson; capital stock \$100,000.

FLORIDA.

Albion-Phosphate Works.—The Albion Phosphate Works will erect two more plants.

Bartow-Phosphate Plant.—H. F. Mayfield will probably erect mining plant for the New York & Florida Phosphate Co.

Citra-Canal.—The Meadow Land Improvement Co. has been organized with a capital stock of \$500,000 to construct twenty-nine miles of canal. Christian Ax, of New York, is president, and H. C. Turnbull, Jr., of Baltimore, Md., vice-president.

Orange Bluff-Lumber Mill.—L. A. Davis & Bros. will build lumber mills.*

Orange Park-Canning Factory.—The establishment of a cannery is talked of.

Pensacola-Cotton Mill.—It is proposed to organize a \$100,000 company on the installment plan to build a cotton mill; committee now soliciting subscriptions. Address W. D. Chipley.

Pensacola-Telephone System.—The Citizens' Telephone Co. has been organized with a capital of \$8000 to construct system. Patrick McHugh, L. Jacoby and H. H. Boyer, T. E. Welles and others are interested. T. E. Welles is president; H. T. Wright, vice-president; L. H. Jacobi, secretary, and W. A. D'Alemberte, treasurer.*

GEORGIA.

Abbeville-Artesian Well.—The city will let contracts for sinking an artesian well. Address the mayor.

Albany-Knitting Mill.—John Thompson, of New York, contemplates removing his knitting mill to Albany.

Atlanta-Ice Plant.—W. W. Childs has leased the Gate City Ice Works, and will put in new machinery for a 15-ton daily output.*

Atlanta-Cotton Mill.—The Fulton Bag and Cotton Mills will erect a new plant of 25,000 spindles.

Atlanta-Bridge.—Proposals will be received until March 18 for erecting the steel highway bridge on Broad street, lately noted; length of span about 137 feet; width, seventy feet, including sidewalks. Plans and specifications will be furnished by R. M. Clayton, city engineer.

Augusta-Immigration.—The Augusta Immigration Co. will be organized by D. B. Dyer, Jas. U. Jackson, Walter Jackson and others with a capital stock of \$20,000. The company will improve lands, induce immigration, etc.

Augusta-Box Factory.—A. J. Twigg and F. E. Fleming will, it is reported, start a box factory.

Augusta-Lithographing Plant.—A \$5000 lithographing plant will be established. Address the Business League.

Cartersville-Cannery.—A movement is afoot for a cannery. Address Jno. H. Wike.

Darien-Towboats.—A charter has been issued to the Darien & Sapelo Towboat Co., capitalized at \$37,000.

Dawson-Laundry.—J. W. Brown will start a steam laundry.*

Elberton-Electric-light Plant.—The city will put in an electric-light plant, bringing power from a creek five miles distant. Address P. M. Hawes.

Elberton-Cotton Mill.—Endeavors are being made to organize a \$300,000 cotton-mill company. Address T. M. Swift.

Gainesville-Marble Quarries.—The Gainesville Marble Co. has been organized to develop quarries.

Gainesville-Ore Mines.—The Chestatec Pyrites Co., lately chartered, has organized with Geo. J. Baldwin, of Savannah, as president, and N. P. Pratt, of Atlanta, secretary. The company will develop valuable pyrites deposits.

Hutchinson-Granite Quarries.—Venable Bros., of Atlanta, have purchased the quarries at Hutchinson owned by the Blue Diamond Granite Co., of Augusta.

Macon-Cotton Mill.—The bureau of information has received a proposition from New England parties for the erection of a \$230,000 cotton mill.

Macon.—The New Cumberland Island Co. has been chartered to succeed the Cumberland Island Co. The incorporators are J. S. Baxter, Geo. W. Duncan, D. Q. Abbott, R. E. Park and others; capital stock \$50,000.

Macon-Land, etc.—Geo. A. Smith, R. A. Nisbet and others have incorporated the Georgia Land & Title Co. for dealing in real estate, etc.

Macon-Shoe Company.—Louis A. Wood, W. H. Turpin and Will Woodson have incorporated the E. P. Strong Shoe Co.

Missler (former name and present P. O. Normandie) Cold-storage Plant.—Messrs. Missler & Krimmert, of 106 West street, New York, are arranging for the erection of a cold-storage warehouse for fruits at Missler. A large tract of land near Missler is being colonized by the above firm.

Montezuma-Artesian Well.—The city will sink an artesian well. Address the mayor.

Summerville-Stave Mill.—The Oxley Stave Co. (address, Munro, Ga.) will erect a stave mill.

KENTUCKY.

Georgetown-Laundry.—H. M. Long and G. E. Montgomery will establish a steam laundry; machinery purchased.

Greenville-Water Works.—The construction of water works is contemplated. Address W. H. Wilkinson.

Louisville-Filter Plant.—A filter plant may be put in. Address Charles Harmony.

Louisville-Saw Mill.—The Kentucky Saw Mill Co. is putting in a new veneer saw mill.

Louisville-Telephone System.—It is proposed to establish a new telephone system. M. S. Forbus, of Cincinnati, Ohio, is interested.

LOUISIANA.

New Orleans-Flour Mill.—W. S. Youree, of Shreveport, contemplates building a flour mill in New Orleans.

New Orleans-Brass Foundry.—Bates & Anderson will operate a brass foundry.

Shreveport-Soap Factory.—E. W. Hedges, of Indianapolis, Ind., contemplates starting a soap factory in Shreveport.

MARYLAND.

Baltimore.—The P. Dougherty Co., of Baltimore county, has been incorporated by Patrick Dougherty, Thomas F. McHugh, Laurence McHugh, William A. Freeburger and George W. Blizard. The company's purpose is general water transportation, warehousing and construction. The capital stock is \$30,000.

Baltimore-Navigation Company.—The Miller Boat Co. has been incorporated by Oliver W. Miller, Charles P. Miller, Edward W. Daniels, L.

B. White and J. Henry Sitrohmeyer with a capital stock of \$2000. The company is for the purpose of owning and navigating vessels of all kinds.

Baltimore-Brick Works.—The Oakland Coal & Coke Co., 21 South Gay street, contemplates building a brick plant.

Baltimore-Realty, etc.—The Income Real Estate & Investment Co. has been incorporated with a capital of \$200,000 by John F. Storm, J. H. Farish, A. D. Powers, L. C. Nelson and H. M. Noel.

Baltimore.—The Mutual Gas Saving Co., for utilizing a patented invention for saving gas, has been incorporated by Henry S. Cunnare, Cooper Lyons, John J. Myers, John A. Blondell and Michael A. McCormick with a capital stock of \$50,000.

Boyd's-Telephone Line.—The Boyd Telephone Co. will extend its lines.

Cumberland-Ice Plant.—The Cumberland Ice Manufacturing Co. is enlarging its plant, increasing capacity from fifteen to twenty-five tons daily.

Frostburg-Electric-light Plant.—J. J. Jones has purchased the Frostburg electric-light plant.

MISSISSIPPI.

Woodville-Bridge.—J. H. Hiteur, of Knoxville, Tenn., has received contract at \$5000 to build a bridge across the Buffalo river.

MISSOURI.

Excelsior Springs-Hotel.—The Excelsior Springs Hotel Co., capital stock \$250,000, has been incorporated by E. E. Porterfield, C. A. Spaulding, H. L. Tomlin, E. L. Morse, R. H. Hamilton and T. A. Scott.

Richmond-Water Works.—J. H. Christopher, of Warrensburg, has franchise to construct water works.*

Springfield-Mercantile.—The Marx Clothing Co., capital stock \$12,000, has been incorporated by Francis Marx, Gus Marx, H. F. Starr, Abe Bloom, Julius Cohn and T. J. Delaney.

St. Charles-Stone Quarry.—The Thompson & Gray Quarry Co. has been organized to open and operate a stone quarry near St. Charles. The incorporators are J. W. Thompson, John Gray, Jules Bertero, A. F. Mispagel, Theodore Fruene and Otto J. Martin.

St. Louis-Realty.—The Income Real Estate & Investment Co., capital stock \$200,000, has been incorporated by John F. Storm, J. H. Farish, A. D. Powers, L. C. Nelson and H. M. Noel.

St. Louis-Iron Works.—The Globe File & Iron Co. has been incorporated with a full-paid capital of \$50,000 to manufacture files and make other iron and steel products, and to carry on a general wholesale and retail hardware and iron business. The incorporators are Chas. H. Nickamp, Henry Speck and Chas. H. Osthoff.

St. Louis.—The St. Louis Dressed Beef Transportation Co. has been incorporated with a capital stock of \$10,000 to furnish railway freight refrigerator cars. The shareholders are Gustav Bischoff, Henry Wollbrinck, Louis Schaeffer, Henry Bischoff, E. D. Brooks and Fred L. Luth.

St. Louis-Hotel.—The Forster Hotel Co. has been incorporated with a capital of \$3500.

St. Louis-Drugs.—The Boston Drug Co. has been incorporated with a full paid capital of \$5000.

St. Louis-Land.—The Missouri Land & Investment Co. has been incorporated with a capital stock of \$5000 by A. J. Naughton, J. W. Bergfeld, L. E. Dehlendorf and G. H. Wright.

St. Louis.—The Papin-Wathing Realty Agency has been incorporated with a capital stock of \$25,000 by Emile S. Papin, Landor Carter, Arthur J. Wathing and Patrick J. Finley.

St. Louis-Lumber.—Tife Park Lumber Co. has been incorporated with a full-paid capital of \$2500 to carry on a lumber business. The incorporators are John H. Verdin, Roswell B. Swift and Theodore Rassier.

St. Louis-Vinegar Manufacturing.—The St. Louis Vinegar Co. has been incorporated with a full-paid capital of \$25,000 for the purpose of manufacturing and selling vinegar and cider. The shareholders are Isaac J. Cushing, David B. Wilmans, Restore C. Sperre, Charles C. Cushing and Isaac J. Cushing.

Sweet Springs-Electric-light and Water Works.—The proposition to issue water-works and electric-light bonds having been defeated at the late election, the city council will be petitioned for another election; F. H. Tisdale, city clerk.

NORTH CAROLINA.

Berry-Shuttle-block Factory.—L. B. Settle will start a shuttle-block factory.*

Charlotte-Loom-harness Works.—H. C. Lazelle is increasing his facilities for the manufacture of loom harness.

Charlotte-Cotton Mill.—The Highland Park

Manufacturing Co., now operating looms only, will expend \$125,000 to erect a 10,000 spindle mill for spinning yarn; Vinton Leddell, president.

Coleridge-Electric-light Plant.—The Enterprise Manufacturing Co. will put in an electric-light plant; contract let.

Lattimore-Cotton Mill.—De Priest Bros. will organize a \$100,000 stock company to erect a cotton mill of 6000 spindles and looms.*

Lincolnton-Iron Works.—Curry & Babington have purchased and will operate the Lincoln Iron Works.

Mocksville-Cotton Mill.—An effort is being made to organize company to build a cotton mill.

Waynesville-Flour Mill.—Howel & Howel contemplates building a roller flour mill.

SOUTH CAROLINA.

Columbia-Starch Factory.—A. R. Heyward and associates contemplates starting a starch factory.*

Florence-Electric-light and Ice Plants.—The Florence Electric Light Works and Ice Plant, recently injured by fire, will be rebuilt without delay.

Florence-Ice Plant.—Henry Bayer, of Charleston, contemplates building an ice plant in Florence.

Greenville-Mattress Factory.—Kohn & Berge will engage in the manufacture of mattresses.

Laurens-Cotton Mill.—The Laurens Cotton Mill, already noted, has elected directors, and W. E. Lucas as president and treasurer. About \$150,000 of the proposed \$200,000 capital is subscribed, and work on plant will soon be commenced.

Newberry-Woodworking Plant.—The Newberry Manufacturing Co. will be organized to manufacture all kinds of articles out of wood—furniture, doors, sash, etc. The capital stock of the company is to be \$2000. E. H. Aull, D. B. Wheeler, H. G. Heef, John A. Eddy and M. J. Scott are interested.

Newberry-Cotton Mill.—It is proposed to organize a cotton mill company on the instalment plan. Address Geo. S. Mower.

Summerton-Starch Factories.—B. Remmers (temporary address, Summerton) is contracting for one or more starch factories.

Union-Cotton Mill.—The Union Cotton Mill Co. expects to commence soon the erection of another cotton mill larger than the present plant (350 looms and 10 762 spindles).

TENNESSEE.

Chattanooga-Cigarette Factory.—The C. L. Davis Cigar Co. will manufacture cigarettes.

Chattanooga-Saw Mill.—The W. C. Heyser Lumber Co. will overhaul its mill and put it in operation; daily capacity 75,000 feet.

Cleveland-Brick Works.—Banks Bros. have purchased new clay lands, to which they will remove their brick works.

Elizabethton-Steel Plant.—Wm. Bell & Co., of New York (office, Produce Exchange Building), expect to organize a company to build the 200 ton steel plant lately noted.*

Jackson-Packing Plant.—It is proposed to establish a plant for slaughtering and packing hogs, to have a capacity at the start of twenty five hogs. R. Lucas can be addressed.

Linden-Bridges.—Perry county will issue \$15,000 in bonds for bridges. Address the county clerk.

South Pittsburg-Coal Mines.—Brittan Bros. & Co. can be addressed in regard to new coal mining company lately noted.

TEXAS.

Brenham-Implement Works.—It is proposed to organize a \$40,000 stock company to establish agricultural implement works.

Coleman City-Water Works.—Bids for the water works lately noted are now being received, and the bonds are for sale; Joseph E. Brown, city clerk.*

Cuero-Telephone System.—The Cuero Telephone Co. has been organized with a capital of \$4000. C. L. Stadler is president; Sam C. Lackey, secretary; W. R. Rathbone, treasurer and manager; directors, C. L. Stadler, William Frohes, William Wagner, S. C. Lackey, Lee Joseph, D. Hunter and W. R. Rathbone. A system will be constructed at once.

Dallas-Mercantile.—Chartered: The Empire Mercantile Co., of Dallas; capital stock \$10,000. Directors, H. W. Ardinger, E. R. Ardinger, of Van Alstyne, and N. Adams.

Galveston.—The Galveston Yacht Club, capital stock \$10,000, has been incorporated by J. M. O. Menard, William A. Hutchins and others.

Hartley-Creamery.—W. C. Collins and others will establish a creamery.*

Moody-Water Works.—The Moody Artesian Well Co., lately chartered, is advertising for

propositions to let contract for a system of water works.

Paris—Cotton Mill.—An Arkadelphia (Ark.) party proposes building a \$100,000 cotton mill in Paris. A stock company is contemplated.

Pittsburg—Tannery.—A steam tannery has been established. Address J. W. Thomas.

Pittsburg—Electric-light and Water Works.—The erection of electric-light and water works is talked of. Address the mayor.

Pittsburg—Ice and Bottling Works.—The Pittsburg Bottling Works are enlarging and putting in a new six ton ice plant; will also put in brick plant of 25,000 daily capacity.

Pittsburg—Barrel Factory.—The Pittsburg Barrel Factory will double its capacity.

San Antonio—Stove Works.—The Schultze Stove Manufacturing Co., capital stock \$20,000, has been incorporated by Herman Schultze, Jr., Claude Wright and Gustav A. Bannet.

Savoy—Coal Mine.—Ary Mitchel has opened a coal mine near Savoy, and proposes organizing a company for further developments.

Waco—Cotton Compress.—The Bessonet Compress Co. has increased its capital stock \$500,000, and will soon commence work on the proposed big compress plant recently noted.

VIRGINIA.

Alexandria—Bakery.—The George R. Hill Co. will rebuild its cracker and cake bakery.*

Chase City—Furniture and Wagon Works.—Emory & Gregory contemplate starting buggy, wagon and furniture works.*

Dayton—Shoe Factory.—The Dayton Shoe Manufacturing Co. will start a factory; machinery has been secured. Geo. W. Hedrick is interested.

Fincastle—Flour Mill.—J. N. Slicer's flour mill, lately noted, will have a daily output of fifty barrels. Plans for building have been prepared.

Intermont—Tannery.—Thos. Corer & Sons, of Winchester, Va., will commence work on their large steam tannery at Intermont as soon as the weather will permit. This company has secured twenty four acres of land for its plant, and will give employment to a large number of hands.

Portsmouth—Cannery.—The Don Canning Co will double the capacity of its plant.

Richmond—Gas Mains.—The city will lay larger mains in the spring. Address Wm. C. Adams, superintendent.

Roanoke—Investments.—A charter has been granted to the Young Men's Investment Co., the purpose of which is to buy and sell real estate and rent and build houses. The capital stock is not to be more than \$5000; president, F. B. Thomas; vice-president, J. R. Collingwood; secretary and treasurer, J. B. Fishburne.

WEST VIRGINIA.

Ceredo—Water Works.—The city will construct water works. C. F. Millinder can be addressed.

Fairmont—Glass Factory.—The Fairmont Glass Factory will probably be rebuilt this summer.

Grafton—Oil Wells, etc.—R. R. Floyd and Malone Hovins, of Mannington, have leased lands near Grafton, and will bore for oil and gas.

Mammoth—Coal Mine.—The Thomas Scholz Coal Co. is now actively engaged in opening an 8½-foot seam splint coal; will be ready to ship by May 1.*

Panther (P. O. at Dotson).—The Panther Boom Co. has been incorporated to construct and operate a boom, etc., by Hiram W. Sibey, Rochester, N. Y.; Isaac Bearinger, Saginaw, Mich.; John F. Mills, Marysville, Mich., and others; maximum capital stock \$50,000.

Parkersburg—Vehicle Works.—The Logan Carriage Co. will rebuild its works lately burned.

BURNED.

Baltimore, Md.—Chas. J. Meister's abattoir; loss \$6000.

Boling, Ala.—The Milner, Caldwell & Flowers Co.'s mill; loss \$20,000.

Decatur, Ala.—The Louisville & Nashville Railroad freight depot.

Easton, Md.—Wm. Hopps's stable; loss \$8000.

Guntersville, Ala.—Neely & Smith's dredging boat and machinery destroyed by ice; loss \$15,000.

Mobile, Ala.—Clarke & Matzenger's cigar and paper-box factory.

Ocala, Fla.—The Ocala Foundry Co.'s engine-house.

Ozark, Ala.—The Huddleston House.

Portsmouth, Va.—W. A. Fiske & Co.'s printing-house; Jno. E. Owens's cigar factory.

Summer Haven, Fla.—Graves's Hotel; loss over \$5000.

BUILDING NOTES.

Anderson, S. C.—School. Plans are wanted for a three-story brick school building; have furnace heat, ventilation, etc. Address the mayor.

Baltimore, Md.—Asylum. A four-story brick building, with iron roof and brownstone founda-

tion, will be erected for an asylum, to contain dining-room and kitchen, dormitories and chapel, to have steam heat, gas, improved ventilating apparatus, etc., to cost \$20,000; contracts partly let. Address J. T. Buckley, 127 Richmond street.

Baltimore, Md.—Church. Plans are wanted for a church edifice, to have steam heat, etc. Address Rev. C. H. Robinson, 1812 McCulloh street.

Baltimore, Md.—Dwellings. Levi Z. Condon will build a number of dwellings on Fulton avenue.

Baltimore, Md.—Synagogue. J. E. Sperry will prepare plans for new synagogue for Lloyd-street congregation.

Belton, Texas—Opera-house. Plans have been prepared for the proposed opera-house and three storerooms below for the Belton Opera-House Co. Bids are now advertised for brick, stone, iron and other material. Building is to be three stories, 75x90 feet, and to cost \$25,000; John Andrewartha, C. E., of Austin, architect.

Blountsville, Ala.—School. The Blount College Co. will erect new building.

Catonsville, Md.—Hotel. The proposed hotel lately noted will doubtless be built at a cost of \$100,000, to have steam laundry, two steam or electric elevators, steam heat, etc. Address John Hubner, 12 East Lexington street, Baltimore, Md.

Charlottesville, Va.—Church. Stanford White, of New York, will prepare plans for the new Grace Church.

Columbia, Ala.—Hotel. The hotel proposed by John T. Davis will contain twenty rooms, plans of which have already been submitted and adopted.

Cumberland, Md.—Public Building. The Senate has passed the bill appropriating \$75,000 for a public building.

Decatur, Ala.—Depot. The Louisville & Nashville Railroad will rebuild its burned freight depot.

Decatur, Texas—Courthouse. F. S. Glover, of Houston, is preparing plans for the new \$70,000 courthouse for Decatur.

Decatur, Texas—Courthouse. The county commissioners will adopt plans and specifications on March 4 for a fire proof courthouse to cost \$65,000; steam heat; plans invited; R. F. Spencer, county judge.

Elizabeth City, N. C.—Hotel. It is stated that Dr. A. L. Pendleton, of Key West, Fla., will build a three-story brick hotel in Elizabeth City.

Fernandina, Fla.—Hotel. A hotel to cost about \$25,000 will be built. The Fernandina Development Co. can be addressed.

Gainesville, Texas—Opera-house. Plans have been prepared for the opera house lately noted; it is to cost \$30,000. Bids will be received for seating the house, scenery, heating, etc. Address F. L. Galigher.

Gaithersburg, Md.—Seminary. The Fairview Seminary Co., capital stock \$15,000, has been organized to erect seminary buildings. Address John B. Diamond.

Griffin, Ga.—Courthouse and Jail. An election will be held on April 26 to decide as to the proposed \$34,000 in bonds for courthouse and jail. Address the county commissioners.

Hancock, Md.—Hotel. New York parties are negotiating with Cover Bros. for a site on which to build a \$7000 hotel.

Harrodsburg, Ky.—Residence. M. W. Curry will build a residence.

Huntington, W. Va.—Church. James B. Stewart will prepare plans for an edifice to be erected for the First Presbyterian Church, to be 60x135 feet in size, two stories, brick, stone foundation, steel ceilings, iron columns, pipe organ, cathedral glass, arc electric lighting, steam heating, radiators, ventilators, etc., to cost \$20,000.

Huntington, W. Va.—Hospital. James B. Stewart has prepared plans for a city hospital, to be 66x110 feet, three stories, stone foundation, incandescent electric lighting, refrigerator, ranges, grates, laundry machinery, etc.; cost \$6500.

Knoxville, Tenn.—Residence. A. J. Scrivers will build a residence.

Jacksonville, Fla.—Hotel. Samuel P. Smith, of Gloucester, Mass., will expend \$10,000 in improving the Everett Hotel at Jacksonville.

La Grange, Texas—Clubhouse. Maurer & Wesling have prepared plans for a frame clubhouse to cost \$4000.

Lenoirs City, Tenn.—Office Building. Chamberlin & Albers will build a store and office building; W. Chamberlin & Co., of Knoxville, to prepare plans.

Louisville, Ky.—Dwellings. W. F. Clark will erect a \$3000 residence.

Martinsburg, W. Va.—Courthouse. Proposals will be opened March 13 for completing approaches to the United States courthouse and postoffice building. Address Chas. E. Kemper, architect supervising architect, Washington, D. C. (See ad. in MANUFACTURERS' RECORD of February 22.)

Mobile, Ala.—Jail. A new city prison is contemplated, and plans have been prepared for a steam-heated structure, with steel cages and other modern appliances. Address the secretary of police committee.

Monroe, La.—Church. The proposed church will likely be built next fall, to seat 500 persons; estimates of cost \$10,000 to \$15,000, and plans not yet prepared; steam-heating apparatus. Address Rev. E. N. Evans.

Nashville, Tenn.—College. Vanderbilt University will erect a new medical college building, four stories, of brick and stone, to cost \$60,000.

Natchitoches, La.—School. Sealed proposals will be received by Thos. D. Boyd until February 23 for the erection of a two-story frame building, measuring 157x65 feet, according to the plans and specifications on file.

New Orleans, La.—Warehouses. Wm. E. Fitzer has prepared plans for a warehouse to be erected for the Haller Manufacturing Co., to be 80x120 feet, three stories, architectural iron, steel beams and metal store fronts, hand power freight elevator, incandescent lighting, hot-air heating, etc., to cost \$25,000. Plans have been prepared for a warehouse to be erected for Charles A. Thiel, to be 60x100 feet in size, four stories, electric lights and bells, freight elevator, steam heating, iron columns and beams, etc., to cost \$12,000.

New Orleans, La.—Church. A new Roman Catholic church will be built to cost \$25,000; James Freret, architect, and O'Neill & Koch, builders. Plans and specifications now ready.

New Orleans, La.—Dwellings. Chas. H. Moise has prepared plans for a residence, to be 40x50 feet in size, have electric bells, incandescent lighting, laundry fixtures, hot water and air heating, range; cost \$10,000. Alfred A. Adams & Co. have prepared plans for a residence to be erected for Wm. E. Rau, to have electric and incandescent lighting, electric bells, hot-air heating; cost \$6500. Same architects have plans for a double cottage, to have electric bells, furnace heat, plumbing and gas fixtures; cost \$5000. Same architects have also prepared plans for a dwelling for H. B. McMurray, to have electric bells and lighting, hot-air heating; cost \$4000. William E. Fitzer has prepared plans for residence for L. Sincere, to have electric bells, electric lights, hot-air heating; cost \$4000.

Palmetto, Fla.—School. The city will issue bonds to erect a school building. Address the mayor.

Palmyra, Mo.—City Hall. Site has been purchased for the new city hall, on which \$6400 will be expended. Address the mayor.

Pittsburg, Texas—Theatre. An opera house will probably be built. Address J. W. Thomas.

Rockdale, Texas—School. The city may build a new school. Address the mayor.

Richmond, Va.—Dwellings. Carl Ruchmund has prepared plans for a residence for Isaac Cohen to cost \$20,000. Wm. C. West has prepared plans for three residences for Thos J. Todd to cost \$5000 each.

Spartanburg, S. C.—Bank Building. Plans by C. C. Hook, of Charlotte, N. C., have been accepted for the new \$6000 bank building. Tessier Bros. have the contract.

Statesboro, N. C.—Hotel. A three story brick hotel will probably be built. Address Dr. M. M. Holland.

St. Louis, Mo.—College. Contract has been awarded to J. B. Legg for the erection of an \$85,000 building for the Barnes Medical College.

St. Louis, Mo.—Schoolhouses. Contracts aggregating \$186,305 for new schoolhouses have been awarded.

St. Louis, Mo.—Dwelling. Constantine Runder will build a \$6600 dwelling.

St. Louis, Mo.—Dwellings. C. W. Kellogg & Son have prepared plans for an apartment building consisting of sixteen flats to be erected for Ira J. Hedrick, 302 Wainwright Building, to be 150x48 feet in size, two stories, pressed and ornamental brick, stone foundations, electric bells and lighting, etc., to cost \$18,000. Same architects have prepared plans for two residences to be erected for A. Fleming, 3114 Rutger street, to have electric bells and lighting, gas fixtures, grates, furnace, bathroom outfit, etc., to cost \$5000.

St. Louis, Mo.—Dwelling. Charles G. Ette will build a double flat to cost about \$7000.

Tampa, Fla.—Hotel. D. B. Gould and others will incorporate a company to build a hotel.

Tampa, Fla.—Synagogue. For information regarding the proposed synagogue address M. H. Cohen.

Valdosta, Ga.—Dwellings. W. L. Nunn, W. S. West and A. C. McLeod will each build dwellings.

Waldo, Fla.—Bank Building. O. F. Dorrance will erect a bank building.

Washington, D. C.—Dwelling. Sarah V. Geiselman will erect a dwelling to cost \$10,000.

Washington, D. C.—Dwellings. F. L. Wright will build a \$3000 dwelling. R. W. Walker & Co. will expend \$4500 in repairs.

Washington, D. C.—Dwellings. C. Sidney Foster has permit to build three brick dwellings to cost \$15,000.

Waycross, Ga.—Office Building. A. B. Bennett will build a store and office building; W. Chamberlin & Co., of Knoxville, Tenn., to prepare plans.

Waycross, Ga.—Residence. G. P. Folks will build a residence.

Wilmington, N. C.—Temple. The Masonic Temple Corporation will be chartered to build a temple.

Yoakum, Texas.—Mauer & Wesling, of L. Grange, Texas, have prepared plans for Chas. A. Kessler for a two-story pressed brick and stone mercantile, office and lodge building, to have stamped steel ceilings, asbestos fire-proofing and metal roof; cost \$12,500.

RAILROAD CONSTRUCTION.

Railroads.

Arcadia, Fla.—The Peace River Phosphate Co. (main office, Savannah, Ga.) advises the MANUFACTURERS' RECORD that the line now under construction is to extend from Arcadia to Liverpool, eighteen miles. Contracts have been let for only one section. Joseph Hull is president.

Augusta, Ga.—President James U. Jackson has called a meeting of the Augusta Southern Company for March 20 to consider the question of changing this line to standard gage. It is eighty miles long, extending from Augusta to Sandersville, Ga.

Cedar Grove, W. Va.—C. C. Lewis, of Cedar Grove, and G. S. Couch, of Charleston, are building a railroad along Kelley's creek valley to give an outlet to the coal and timber deposits of that section. About six miles have been completed.

Cedar Grove, W. Va.—D. Ward, of Detroit, Mich., is building five miles of private railway line in Kelley's creek valley.

Chattanooga, Tenn.—The bondholders of the Chattanooga Southern have purchased the line and may extend it from Gadsden, Ala., south. Henry P. Tompkins, of Atlanta, Ga., represents the bondholders.

Clarksdale, Miss.—Lamar Fontaine & Sons, in a letter to the MANUFACTURERS' RECORD, state that they are constructing nine miles of line through timber land which they own. The total length of the road will be twenty-two miles, and one of its terminal points is to be Belen, in Quitman county. The road will be a feeder to the Queen & Crescent system.

Conway, S. C.—It is understood that E. R. Stevens, a capitalist of Southport, N. C., is back of the plan to build a railroad from Conway to Southport. The idea is to complete it to Sumter, and then connect with some trunk line, such as the Seaboard Air Line. Brunswick county, N. C., will take \$50,000 in bonds of the road.

Dublin, Texas.—The proposed line from the Thurber coalfields to the iron-ore beds near Llano is called the Llano, Dublin & Thurber. The Waco Commercial Club is endeavoring to secure \$15,000 in stock subscriptions to it.

Dyersburg, Tenn.—Prest. J. M. Brackin, of the Dyersburg & Mississippi River road, writes the MANUFACTURERS' RECORD that the line will be fifteen miles long and cost about \$7000 per mile. It extends through tracts of oak, walnut, cottonwood, hickory and cypress. No contracts have been let for construction.

Elkton, Md.—The directors of the Lancaster, Cecil & Southern have decided to complete the line from Providence, Md., to Oxford, Pa., where it will connect with a line to Lancaster, Pa. It will also be extended from Childs to Elkton, in Maryland. W. M. Franklin and Jacob Long, of Lancaster, and W. T. Warburton, of Elkton, are among the directors.

Fernandina, Fla.—The scheme to build a line from Fernandina to Valdosta, Ga., has resulted in the formation of the Fernandina Western Railway Co. with \$500,000 capital. About forty miles of track are already completed on the route, which is 110 miles in length. N. B. Borden and S. D. Swain are among those interested.

Fort Smith, Ark.—The Little Rock & Pacific Company, of which Hon. W. M. Fishback, of Little Rock, is president, is negotiating with Fort Smith people relative to beginning work on the section of the proposed line leading from that city.

Georgetown, Texas.—About 100 men are engaged in grading the Georgetown & Granger road. M. P. Kelley is manager.

Johnson City, Tenn.—Samuel Hunt, president, has called a meeting of the Ohio River & Charleston Company for April 10 to consider a bond issue of \$15,000 per mile to connect the Tennessee and North Carolina branches of the line.

Kennett, Mo.—The Kennett, Caruthersville & Pemiscot line has been completed from Kennett to Caruthersville, and is in operation. Louis Houck, of Cape Girardeau, Mo., is interested.

Little Rock, Ark.—It is reported that Uriah Lott has formulated another plan to build a road from Little Rock to Hot Springs.

McDonald's Mill, Ga.—The MANUFACTURERS' RECORD is informed that J. S. Baily & Co., of McDonald's Mill, intend completing the road from Douglas to that point. Only four miles of track are required.

Mobile, Ala.—A bill is pending in the legislature

extending the time for beginning work on the Birmingham, Mobile & Navy Cove Harbor Railroad. Manager McNulty claims that the company is ready to begin its construction in Baldwin county.

Natchez, Miss.—A letter to the MANUFACTURERS' RECORD states that contractors have been looking over the route of the proposed road from Natchez to Bowie, Ark., in which Hon H. R. Steele is interested.

Port Royal, S. C.—The Santee, Walterboro & Port Royal Company, for which a charter was recently granted by the legislature, intends building from a point on the South Carolina & Georgia road to Port Royal. E. S. Wilde, E. B. Hollings and G. F. Van Kolnitz, Jr., of Charleston, are among the directors.

Raleigh, N. C.—Representative Fowler has introduced a bill to incorporate the Elizabethtown, Chadbourne & Abbottsburg Railway.

Raleigh, N. C.—A bill has been introduced in the legislature chartering the Tennessee & Ohio Railway.

Raleigh, N. C.—Representative Norris has introduced a bill into the State legislature incorporating the Carolina & Northwestern line.

Electric Railways.

Charleston, W. Va.—The West Charleston Street Railway Co. has been incorporated to build a road in the suburbs about five miles long. G. S. Laidley, G. S. Couch and J. W. Raikes are among the incorporators.

Chattanooga, Tenn.—The Chattanooga Electric Company, it is reported, will extend its line to Chickamauga Park, a distance of about nine miles. The expense will be about \$50,000. Receiver Divine may be addressed.

Kansas City, Mo.—President Holmes, of the Kansas City Cable Railway Co., states that contracts will probably be let for changing the line to a trolley system in about ten days. The line is about nine miles long.

Keysville, Va.—The proposed electric road to Farmville will be twenty-one miles long. About ten miles of the distance are graded and ready for ties.

Norfolk, Va.—J. P. Andre Mottu is president and C. A. Woodard vice president of the South Norfolk Street Railway Co., which proposes building an electric road connecting Norfolk and Berkeley suburb.

Norfolk, Va.—Pottsville (Pa.) people have purchased the Ocean View Railroad, and, it is stated, will change it to an electric road and extend it to Willoughby Spit, opposite Old Point Comfort.

Orlando, Fla.—A. F. Williams is one of the promoters of the electric railway in Orlando.

Palmetto, Fla.—R. F. Willis, secretary of the Palmetto Terminal Co., advises the MANUFACTURERS' RECORD that the road will be about eight miles in length and 49-inch gage. The capital is to be \$10,000. The company will receive bids for construction and equipment.

Pine Bluff, Ark.—John O'Connell, president of the Citizens' Street Railway Co., states that arrangements are being made to change the motive power to electricity.

Selmer, Tenn.—Secretary Jop'ing, of the Selmer & Tennessee River electric road, writes the MANUFACTURERS' RECORD that its exact length is to be eighteen miles. A part of the capital to build it will be \$175,000 in 6 per cent. bonds issued by Selmer, also stock subscribed by Memphis people. It is expected to begin operations in April. The line will extend from Selmer to the Tennessee river.

MACHINERY WANTED.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Bakery Equipment.—The Geo. R. Hill Co., Alexandria, Va., wants equipment for cracker and cake bakery.

Belting.—See "pulleys, etc."

Belting.—See "pulleys."

Belting.—The Hardwood Manufacturing Co., Piedmont, Ala., will need 10-inch belting.

Belting Machine.—The Withington & Russell Co., Jackson, Mich., will want belting machines.

Boilers.—Wanted, two 100 to 150 boilers, first or second-hand. Address Lock Box 41, Florence, S. C.

Boiler and Engine.—G. N. Buchanan, Luverne,

Ala., wants prices on forty horse-power boiler and engine, new or second-hand.

Boiler and Engine.—The Nickell Co., Ronceverte, W. Va., wants forty horse-power engine and fifty horse-power boiler.

Boiler and Engine.—Wanted, a second hand engine of five to six horse power and boiler of ten to twelve horse-power. State condition and price to 277 South Street, Baltimore, Md.

Boilers and Engines.—Wanted, two second-hand engines for rolling mill; the smallest not to have a cylinder less than 30x35 inches, with a fly-wheel of twenty-five tons; the largest not to be over 42x72 cylinder, with a fly-wheel of fifty tons. Boilers for same to be tubulars, 72x18 inches, with half-arch fronts. Send cuts and state condition, least price delivered. Middleport, Ohio. Address R. E. Grant, Middleport, Ohio.

Boilers and Engines.—C. A. Mezger, M. E., Shelby, N. C., wants steam engines, with boilers, of about eight to ten horse-power.

Boilers and Engines.—L. A. Davis & Bro., Orange Bluff, Fla., will buy five boilers thirty-six inches by thirty-five feet, seventy-five horse-power engine and twenty-five horse power engine.

Boilers and Engines.—W. W. Dusen & Bro., Crowley, La., want a battery of two boilers, eighty horse power each, with half-arch front, and one engine, 125 horse-power, for operating pumping outfit; this machinery to be delivered f. o. b. at Crowley, and first class in every particular, with all attachments ready to operate; also want an eighty horse-power boiler, half-arch, and one sixty horse-power engine, all complete as above; all to be delivered within sixty days.

Building Supplies.—Jno. T. Davis, Columbia, Ala., will want lime, roofing material, sash, doors, blinds, etc.

Church Bell.—W. L. Arnolett, Ronceverte, W. Va., wants a large church bell.

Corn Mill.—B. F. Keith, Jr., Wilmington, N. C., wants a mill to grind ears of corn, without shucking, for feed.

Cotton Machinery.—The Sweetwater Woolen Mills, Sweetwater, Tenn., wants a set of 48 inch cards.

Cotton-mill Machinery.—Machinery will be wanted for manufacturing convicts' stripes. Address W. A. Neal, Columbia, S. C.

Cotton-mill Machinery.—De Priest Bros., Lattimore, N. C., will want 6000 spindles and looms to suit.

Creamery.—W. C. Collins Hartley, Texas, wants a creamery plant to handle milk of 200 to 400 cows.

Drill.—The Withington & Russell Co., Jackson, Mich., will want a drill.

Electric light Plant.—The Old Abe Co., White Oaks, New Mexico, is figuring on an electric-lighting plant (not including boiler) of about 500 incandescent and eight arc lights; will want several miles of wire; Frank J. Sager, secretary.

Electric-light Plant.—Proposals are invited until February 26 for complete erection and equipment of an electric light plant. Plans and specifications can be had upon application to D. E. Evans & Co., of Baltimore, Md.; L. P. Rodes, city engineer.

Electric-light Plant.—Wanted, dynamo, 30 to 50 arc, 1000 to 1500 incandescent, first or second-hand. Address Lock Box 41, Florence, S. C.

Engine.—Wanted, 100 to 150 horse-power, high-speed, first or second-hand. Address Lock Box 41, Florence, S. C.

Engine.—R. R. Swormstedt, 106 South Gay street, Baltimore, Md., wants a five or six horse-power gas engine.

Excelsior Machinery.—L. Lucy, Helena, Ark., wants to buy excelsior cutting machinery.

Exhaust Fan.—The Columbia Peanut Co., Norfolk, Va., wants an exhaust fan to take dust out of building.

Fire Equipment.—Equipment for fire department will be wanted at Gaithersburg, Md. Address R. D. Trundle.

Flour Mill.—Morgan & Killian, Clyde, N. C., will purchase by next May three double-stand rolls, receiving separator, horizontal close scouter, bolts, scrapers, purifier, corn sheller and cleaner, hopper scales.

Flour Mill.—The Nickell Co., Ronceverte, W. Va., wants four stands, rolls, etc., to complete 75-barrel mill.

Furniture Factory.—Emory & Gregory, Chase City, Va., will want machinery for manufacturing furniture.

Gas Engine.—R. S. Swormstedt, 106 South Gay street, Baltimore, Md., wants a five to six horse-power gas engine.

Gas Engine.—B. Brock, 424 Ninth street N. W., Washington, D. C., wants a small gas engine (Otto preferred); good condition.

Gasoline Engine.—Mohr & Corbin, Spring Garden, Va., want to buy a gasoline engine.

Harness Machinery.—The East Texas Tanning Co., Pittsburg, Texas, needs machinery for harness making and shoe manufacturing.

Heating Apparatus.—F. L. Galigher, Gainesville,

Texas, will want heating apparatus for opera-house.

Hoe Machinery.—The Withington & Russell Co., Jackson, Mich., will want machines specifically for hoe making.

Ice Plant.—Wanted, 20 to 30 ton ice plant, first or second hand. Address Lock Box 41, Florence, S. C.

Ice-plant Machinery.—W. W. Childs, P. O. Box 66, Atlanta, Ga., wants a new ammonia still and some coils.

Knitting Machinery.—Thos. A. Davis, Anniston, Ala., wants to correspond with manufacturers of machinery for making towels, bed-spreads and hosiery.

Knitting Machinery.—R. E. Hightower, Thomas-ton, Ga., wants to correspond with manufacturers of knitting machinery.

Lathe and Planer.—The Hawkinsville Variety Works, Hawkinsville, Ga., wants a four-side planer and a turning lathe.

Laundry Machinery.—J. W. Brown, Dawson, Ga., wants complete equipments for a steam laundry.

Mining Supplies.—The Thomas-Scholz Coal Co., Mammoth, W. Va., will want mine screens, baskets, 20 pound steel T rails, scales, mine cars, corrugated roofing, etc.

Oil-mill Machinery, etc.—The Columbia Peanut Co., Norfolk, Va., wants addresses of manufacturers of oil mill supplies and machinery for making oil from peanuts and cottonseed.

Phosphate Plant.—Winfield S. Preskey, Ocala, Fla., wants estimates on a complete phosphate plant of about sixty tons daily capacity.

Pipe.—Owen Tyler, Louisville, Ky., wants quotations on sewer pipe f. o. b. Louisville.

Power Press.—The Lexington Manufacturing Co., Lexington, S. C., is in the market for a power press (cloth press).

Printing Press.—Carrick W. Crozier, Waldo, Fla., wants an Adams hand cylinder press for eight-column paper.

Pulleys, etc.—The Sweetwater Woolen Mills, Sweetwater, Tenn., will buy pulleys, hangers, shafting and belting.

Pulleys, etc.—Morgan & Killian, Clyde, N. C., will purchase by May next pulleys, shafting and belting.

Pump.—Jos. Zeiler, Roseville, Ark., wants to correspond with the maker of the No. 2 Royal steam pump.

Railroad Equipment.—The Palmetto Terminal Co. is in the market for all material for 49-inch gage railroad. Address T. A. Mitchell, president, Palmetto, Fla.

Railroad Equipment.—The A. M. Stevens Lumber Co., Dyersburg, Tenn., will appreciate information concerning probable cost of equipment for fifteen miles of road.

Railroad Equipment.—See "mining supplies."

Railroad Equipment.—L. A. Davis & Bro., Orange Bluff, Fla., will buy locomotive engine and four miles of 35-pound steel rails.

Rails.—See "mining supplies."

Roofing.—See "mining supplies."

Roofing.—The Christopher Double Power Engine Co., Spartanburg, S. C., will buy roofing.

Roofing.—Owen Tyler, Louisville, Ky., wants quotations on corrugated iron, steel ceilings, etc., f. o. b. Louisville.

Saws.—The Hawkinsville Variety Works, Hawkinsville, Ga., wants rip saw and band saw.

Saw Mill.—R. L. Keisler, Lewisdale, S. C., wants to buy a light saw mill for cash.

Sewer Works.—Sealed proposals will be received until March 19 for laying sewer from United States building at Tallahassee, Fla. Address Chas. E. Kemper, supervising architect, Washington, D. C.

Shoe Machinery.—Machinery for manufacturing shoes will be wanted at Columbia, S. C. Address W. A. Neal.

Shoe Machinery.—See "harness machinery."

Soap Machinery.—J. A. Whitehurst, Sylvia, Kans., Box 47, wants prices on soap machinery.

Starch Machinery.—A. R. Heyward, Columbia, S. C., wants machinery for starch factory and general information.

Steel Plant.—Wm. Bell & Co., Produce Exchange Building, New York city, will be in the market for full supply of machinery for 200-ton steel plant.

Tank Cars.—A. H. Kay, agent, New Orleans, La., will probably be in the market for cotton-oil tank cars, new or second-hand.

Telephone Equipment.—The Citizens' Telephone Co., T. E. Welles, president, Pensacola, Fla., wants to correspond with manufacturers of telephone equipment.

Telephone Equipment.—The Mutual Telephone Co., Corsicana, Texas, solicits lowest cash delivered prices on from 100 to 150 battery telephones for immediate delivery, with all necessary adjuncts for installing same. They must be guaranteed first-class in make and for service, and against infringement, and such as will operate in

perfect harmony with the 100 "National" instruments already installed.

Telephone Equipment.—The Virginia Telephone Co., Norfolk, Va., will want equipment.

Tinners' Tools.—H. P. Ohm, 116 North Greene street, Baltimore, Md., wants a set of second-hand tinners' tools.

Traction Engines.—W. F. Pendleton, Farmersville, Texas, wants to correspond with manufacturers of traction engines for pulling gang plows and furnishing power for hay presses, threshers, etc.

Type.—The Texas Resources Publishing Co., Waco, Texas, may need some special type; J. K. Street, secretary.

Vehicle Machinery.—Emory & Gregory, Chase City, Va., will want machinery for manufacturing buggies and wagons.

Water Works.—J. H. Christopher, Warrensburg, Mo., will buy water works equipment, including five miles of pipe, two 750 000 compound duplex pumping engines, etc.

Water Works.—Bids will be opened March 1 for construction of water works at Coleman City, Texas; Jos. E. Brown, city clerk.

Wire-cutting Machine.—G. W. McCoolle Manufacturing Co., St. Louis, Mo., wants automatic machine for cutting No. 11 wire into 14 or 16-inch lengths and linking them together similar to surveyor's chain.

Woodworking Machinery.—Wanted to buy a second hand matcher, double surfacer and resaw. Address the Central Manufacturing Co., Chattanooga, Tenn.

Woodworking Machinery.—Frank J. Sager, White Oaks, New Mexico, wants catalogues and prices of spoke and handle lathes (automatic); also stove machinery.

Woodworking Machinery.—L. B. Settle, Berry, N. C., wants machinery for cutting shuttle-blocks.

The Meridian Broom Works, Meridian, Miss., wants information concerning the cultivation of broom-corn.

TRADE LITERATURE.

A CARD sent out by the Lodge & Shipley Machine Tool Co., Cincinnati, Ohio, gives points on a new engine lathe, 60 inch pulley lathe and a turret chucking lathe made by this company.

A CALENDAR lithographed in colors, issued by the Henry Martin Brick Machine Manufacturing Co., of Lancaster, Pa., gives a view of a style of the machinery made by this concern. It also presents a picture of Henry Martin, the inventor of this widely-known make of machinery.

A CATALOGUE issued by the Swarts Metal Refining Co., of Chicago, Ill., describes the different kinds of metals made by this company. Its produce includes the highest grades of metal for high-speed engines, and all bearing machinery and metals for plumbers, tinners, roofers, hardware dealers, newspapers and electrotypers.

OWNERS of steam plants will be interested in a publication entitled "Exhaust Steam Economy," which shows how increased power at a reduced cost may be obtained. The pamphlet is issued by Warren Webster & Co., of Camden, N. J., who are specialists in examining steam plants where increased efficiency and greater economy is desired in heating feed water for steam boilers, also for the warming of buildings by the utilization of exhaust steam without back pressure upon the engines, irrespective of present heaters or systems employed. This firm has installed its "Vacuum" feed-water heater and purifier for over 40,000 horse power during the past six years, and results have been achieved that have convinced the most skeptical and been a source of wonder as well as profit to the purchaser. The publication issued by this firm describes in detail this remarkable apparatus and gives a list of places where it can be seen in operation, as well as the opinions of a number of representative users embracing many leading industrial and manufacturing establishments.

TRADE NOTES.

THE M. A. Furbush & Son Machine Co., of Philadelphia, Pa., has an order from Joseph Lomax & Son, of the same city, for two of its new pattern Murkland high speed Ingram carpet looms.

THE "Providence" capstan, as made by the American Ship Windlass Co., has made for itself a reputation which induces people all over the world to call for it in their specifications. It is quite common, even in Europe, in the specifications for a ship for the "Providence" capstans to be called for. They are now, it is believed, as well known there, particularly in Great Britain, as they are in the United States.

WEST VIRGINIA fire-brick is fast becoming more widely known, and its good qualities are receiving more general appreciation. We note that a superior quality of this brick is to be

handled by Owen Tyler, of Louisville, Ky., who has secured an agency from a West Virginia company. Mr. Tyler succeeded the firm of Tyler & De Funiak, and has established a large and important trade in building material and specialties.

An increase of facilities in all departments has been completed by the Wrightsville Hardware Co., of Wrightsville, Pa. The improvements were made in order to handle the increasing volume of the company's business. A new boiler-house was built, and a 125 horse power boiler and engine installed. A new cupola and additional foundry room have also been provided. The company manufactures cabinet and builders' hardware, iron toys and specialties in iron.

THE completion of the great "Jeddo" tunnel attracts attention to the meritorious performances of the Ingersoll-Sergeant rock drills and air compressors, which were used exclusively in this work. This tunnel is five miles long and 7111 feet, and was constructed to drain one of the largest coal mines near Hazleton, Pa. Some remarkable records for fast tunnel driving were made with the Ingersoll-Sergeant machines during the progress of the work. In December, 1893, the heading was driven 323 feet in twenty seven days, working two shifts of ten hours each, and driving full section with two Ingersoll-Sergeant three-and-one-quarter-inch drills in shotted on columns. The record for May, 1894, showed 308 feet cleaned up in one heading and 301½ in the other. In June, 1894, 305 feet were cleaned up in one heading and 300 feet in another. Compressed air was supplied by Ingersoll-Sergeant "Straight Line" air compressors of the most approved type, and the air was conveyed for a distance of 10,860 feet from compressor to drills.

The South's Response.

About three weeks ago Mr. R. H. Edmonds, the editor of the MANUFACTURERS' RECORD, of Baltimore, inaugurated a movement in the South for the relief of the destitute people in Nebraska. Mr. Edmonds's idea was that as the South was blessed this year with an enormous corn crop and its meat houses are filled to overflowing, it would be but an act of Christian charity for its people to share their abundance with the starving and freezing ones of the Northwest. He furthermore believed that it would do much to cement the feeling of friendship between that section and the West, and would be as bread cast upon the waters to be gathered after many days by the removal of sectional prejudices and hates which have existed for so many years. The spirit which prompted Mr. Edmonds in this noble movement is certainly commendable. It is an acceptance of the hand of friendship which the North has on more than one occasion extended to the South. When New Orleans and Memphis were stricken with yellow fever the North was not slow to answer the call of relief. When the flood sufferers appealed for assistance the North flew to their rescue. And it was so with the Charleston earthquake victims. It shows that one touch of nature makes the whole world kin. As a result of Mr. Edmonds's movement one solid trainload, aggregating about \$15,000 in value, has started from Atlanta; another of even greater value will go from New Orleans in a day or two, while other points will follow, thus insuring aggregate contributions of at least \$50,000 from the South. The promptness with which the Southern States have responded to the call will be appreciated. The time may come when it can be reciprocated fourfold.—Crawfordville (Ind.) Journal.

Louisville's Advantages.

In a letter to the MANUFACTURERS' RECORD regarding the condition of the South, Mr. R. M. Kelly, of Davis, Kelly & Co., Louisville, Ky., writes:

"I have noticed with pleasure the interest you have taken for years in the industrial progress of the South, and congratulate you on the good work you have done for this section of the country. As you have stated time and time again, this part of the country will eventually become the manufacturing centre of the United States. Louisville is rapidly forging ahead as a manufacturing centre, and now has a population of 205,000, while in 1890 it was

only 165,000. Being in the centre of the population of the United States, her geographical position is better adapted for a distributing point than any city that can be named, while her shipping facilities are unsurpassed, having four large railroad systems centring within her limits, and being situated on one of the largest navigable rivers of the world. Raw material is easily accessible on all sides, and labor and fuel are cheap. We are always willing and anxious to welcome every manufacturer who is looking for a location for his plant."

Real Estate in Baltimore.

One of the encouraging signs of the times is activity in real estate. From almost all the large cities come reports that property is in demand, that prices are gradually improving and that capital is seeking investment more and more in building lots and houses. In many cases railroad stocks and bond securities are being unloaded to make purchases in land.

Baltimore is no exception to the rule. Despite the hard times, building operations have been carried forward at a rapid rate; sales in real estate have been frequent, and investments in ground rents and mortgages have attracted no small degree of attention. The truth seems to be that capitalists have confidence in the expansion of the city, in the extension of its business and the multiplication of its industries. As a consequence they are investing in available ground for building purposes, buying houses in fee simple to hold for rental, or are putting money into first mortgages in the belief that their holdings will not depreciate as time goes on.

This condition of affairs is suggestive of a brilliant destiny for our city. Those who are investing their money will not fail to labor for the improvement of property and its enhanced value. To this end rapid-transit facilities will be kept at a high grade of excellence, and lines will be extended to satisfy the needs of rapidly-growing suburbs. All arrangements for the comfort and convenience of the people will be looked after, and trade may be expected to keep pace with the growth of population.

In this view of the case activity in real estate lies at the foundation of prosperity, and the hope may be expressed that industry and business may soon feel the inspiration of that confidence which has actuated extensive transactions in land and buildings within the last two years.—Baltimore Daily Herald.

"A Grand Work."

The following appeared as an editorial in the Florence (Ala.) Herald of January 31:

"For many months past our attention has been drawn while looking over our numerous exchanges and witnessing the busy whirl of 'homeseekers' in our midst to the wonderful immigration that is constantly pouring into this section of the South.

"Among the potent agencies at work for the rehabilitation of the South and opening the way to Northern homeseekers and capitalists here, we desire to make special mention of the *Southern States*, a monthly magazine published at Baltimore, Md., and edited by William H. Edmonds, a pioneer and champion of Southern development.

"The disinterested labors of this powerful and widely-circulated magazine are beyond question the leading feature behind and propelling the mighty avalanche now sweeping southward.

"The columns of the *Southern States* are open alike to the rich and poor, and every month its pages teem with letters written by Northern people who reside in and are highly pleased with the Sunny South.

"The advantages of every location, the numerous enterprises being established throughout the South, the vast amount of capital that is constantly being invested

here, the aid and encouragement so generously offered by the railroads, the thriving colonies that have been located, are all mentioned, and the information given is reliable.

"We are informed by Mr. Thurston H. Allen, of the Van Buskirk-McCafferty Company, that his company inserted a short advertisement in this magazine for the months of September and October, and had over 500 inquiries from farmers in the North and Northwest."

Why not advertise in the *Southern States* magazine and reap the same results?

HARFORD COUNTY, MD., is a section of the South where the subject of good roads is receiving close attention. So far four road leagues have been formed in Harford—the Belair, Churchville, Darlington and Creswell Leagues. The Fallston Farmers' Club and the Hickory Club have charge of the roads in their respective precincts on the league plan. The Darlington League was the first formed. The various leagues have in their charge more than 125 miles of the county roads.

MISSISSIPPI stands to the fore with its advantages for cotton manufacturing. Cheap fuel, intelligent and low-priced labor, low taxes, abundance of water and favorable legislation, not to speak of cotton-fields in sight of the mill, are advantages that cannot be gainsaid. The town of Magnolia is aiming for such an industry, and the citizens stand ready to offer substantial co-operation to any practical and trustworthy party inaugurating such an enterprise.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises and needing machinery or supplies of any kind will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

Saturday and Sunday Excursion to Washington via Pennsylvania Railroad

On February 23 and 24 the Pennsylvania Railroad Co. will sell at all its Baltimore ticket offices excursion tickets to Washington, valid for going and return passage on all regular trains, and good for return until Monday, February 25, inclusive, at the low rate of \$1.25 for the round trip.

THE water route of the Norwich Line, between Boston and New York, is entirely within Long Island sound, thus avoiding the rough water and seasickness incidental to "outside lines." The dining saloon on these steamers is on the upper deck, insuring plenty of light and air. The state-rooms are \$1 and \$2, according to size and location, and accommodate two or more persons. Always ask for tickets via this line at all the principal ticket offices in Philadelphia, Washington, Baltimore, Harrisburg and all points South and West. Passengers for Boston and the East can avoid the inconvenience of carriage transportation in New York, as steamers leave the pier adjoining Pennsylvania Railroad Ferry, foot of Desbrosses street.

Winter Tours to Texas and Mexico.

The easiest and best way to reach the winter tourist resorts of Texas and Mexico is via the International Route (International & Great Northern Railroad) which forms a portion of the short line from Chicago, St. Louis and Memphis to Austin, San Antonio, Houston, Galveston, Laredo and principal Mexican points. Through Pullman sleepers, without change, daily between Chicago, St. Louis and Austin, San Antonio and Laredo, St. Louis and Houston and Galveston, Memphis and Austin and San Antonio via Cotton Belt Route and Tyler, and between Dallas and Austin and San Antonio via Hearne. Call on nearest ticket agent for rates, time-tables and full information, or for printed matter descriptive of Texas and Mexico, address D. J. Price, assistant general passenger agent, Palestine, Texas.

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An Attractive Southern Property.

The advertiser has for sale one of the most attractive properties in the South. It comprises 1300 acres, 450 being in cultivation and 700 in virgin pine forest. It has exceptionally good railroad facilities. The land will produce large crops of corn, cotton, tobacco and all ordinary crops, and is particularly well suited to trucking and fruit growing. In the centre of the property there is a beautiful clear lake covering 150 acres, which abounds in fish and is a favorite haunt of ducks and other waterfowl. It is admirably adapted to boating, bathing, etc. The land surrounding the lake is entirely free from swam and marsh, and affords beautiful sites for residences. The forest and fields abound in all kinds of game. As a hunting preserve this place cannot be surpassed. It could be made one of the most delightful homes in the South. For a fine resort hotel no better place can be found in America. The locality is preeminently healthy. Price \$10,000. For particulars address B. S. C., care MANUFACTURERS' RECORD.

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